THE MACROLEPIDOPTERA OF THE WORLD

A SYSTEMATIC DESCRIPTION OF THE HITHERTO KNOWN MACROLEPIDOPTERA

IN COLLABORATION WITH WELL-KNOWN SPECIALISTS

EDITED BY

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Introduction.

Much more than any other faunistic region of the world, the Ethiopian fauna has influenced the facies of the *Geometridae* of this region. The conspicuous character of the scenery of Central Africa and of the Ethiopian parts of Arabia is the steppe alternating with deserts, which is verdant only during the wet season, whilst for the greatest part of the year it only bears dried stubble. The insect fauna exhibits rather few species, mostly also of a stunted habitus, so that the vast sandy plains appear to be dead during the greatest part of the year, and the animals of the steppes, which owing to the scarcity of vegetation have great difficulties in hiding from their rapacious persecutors, are forced to wear a sandy yellow protective colouring which we also find with a very great number of African *Geometridae*. In addition to this sand-colour, the African *Geometridae* have the habit of settling on the bare ground with their wings spread out flat, a habit which is likewise exhibited by the few palaearctic *Geometridae* living on sandy downs (such as *Mesotype virgata*, *Tephrina murinaria* and *arenacearia* and others).

The *Geometridae* are more than the members of any other lepidopteral family able to feed on dry and withered plants, and they are therefore particularly well fitted to penetrate into the deserts. That is the reason why, in advancing through the Sahara we still encounter in remote oases whole colonies of *Geometridae* such as *Rhodometra sacraria* and the small *Oar*. The former species is numbered among the few lepidoptera for which the broad desert-zone of the Sahara does not form a geographical frontier and which may occur both in the northern parts of Africa and at the Cape of Good Hope.

In the immense steppes of Africa, where trees are only of sporadic occurrence or altogether absent, we do not meet with any *Geometridae* the colouring of which is adapted to the bark of trees, a contrast to their great numbers in the palaearctic region. The *Gnophos*, *Boarmia*, *Medasina*, *Elphos* etc. which are entirely absent or sparsely represented in Africa, do not fit into the chiefly steppe-like landscape and can at any rate only propagate in the Hylaea and the countries with more hilly districts. Thus there are but very few groups of *Geometridae* that have been able to differentiate into a greater number of forms in the mostly monotonous African Continent, whereas the representatives of numerous other Geometrid genera that are widely distributed in all the other parts of the globe have not yet been discovered in Africa. Moreover, it is also probably due to the scarcity of trees or wood that the *Pingasa*, *Terpna* or *Hypodoxa* which are strongly represented in the Old World, are almost entirely absent in Africa proper, whilst in Madagascar, the fauna of which is in many ways similar to the Indian fauna, they occur in few forms and but one species — *Pingasa ruginaria* (Vol. 12, pl. 5 d, f) — forming local races is distributed over the African Continent.

The general Geometrid type itself is presumably rather old considering the highly developed adaptation together with the almost entire absence of mimicry, the most equable distribution over the whole globe, and the rare consistency in the structure of the larvae, pupae, and imagines, beside the extremely complex variability in the colouring and marking of the different species. That may also be the reason why in the tropical regions — particularly those of Africa — Geometrid forms and individuals by no means occur in such great numbers as the phylogenetically young branches of the lepidopterous tribe: the *Neotropidae*, the *Chalcosiinae*, or *Erycinidae*. The same numerical superiority of *Geometridae* as occurs in Iceland, New Zealand, Patagonia, or Labrador, is also met with in the Cape Colony, at the borders of the Sahara, and in the Abyssinian high steppes, though not in the African Hylaea which otherwise abounds so much in insects.

As the members of the Geometrid family are rather feebly endowed with muscular force, they are more inclined to passive migration than to active migration. Only the members of a very limited number of Geometrid groups, such as *Bupalus* in the Old World and the *Nelo* and others from the *Erateina*-group in the New World, are fit for continuous flights. Nearly all the species known hardly ever fly for great distances, and even the variegated day-fliers, such as *Ematurga*, *Fidonia*, *Pardalodes*, and *Pseudopanthera*, frequently rest during

their swarming period, although from their slender body provided with relatively large wings we might infer their ability for an easy and continual flight, as for instance in the *Morpho*, *Urania*, *Hestia* etc.

Nowhere in the world is the average size of the *Geometridae* as low as in Africa. The palaearctic, Indian, American, and even Australian *Hemitheinae* and *Geometrinae* mostly excel the African members of the same group to a considerable extent, so that many Africans look like undersized insects compared with their relatives from other countries, for instance the *Mimandria* or *Xenochroma* from Cape Colony or even Madagascar compared with the Indian or Papuan *Pingasa*, *Terpna* and *Aelochroma*, the African *Gelasma* with the Papuan *Chrysochloroma*, the eastern palaearctic *Gel. grandificaria*, *illiturata* with the African mostly insignificant *Prasinocyma*, and the latter besides with the Papuan *Pr. bicolor*, or *dioscorodes* or their Indian relatives. Also in single cases the size of Indian *Geometrinae*, such as *Medasina*, *Xandrames* or *Elphos* is hardly or never attained by African *Boarmiinae*, to say nothing at all of the large *Urapteryginae*.

A considerable number of the African *Geometridae* prefer the sunshine, in the same way as numerous European and particularly South-American *Geometridae* fly in the daytime. The *Aletis* and *Cartaletis* do this as a matter of course, because the daylight is required for the effect of mimicry among moving animals.

It was only in the last decades that this relationship of the Ethiopian *Geometridae* to mimicry was more clearly elucidated. The fact that a great many species exhibited a striking resemblance which could not be explained otherwise than by mimicry, had of course struck already the first collectors who ventured to penetrate into the more inaccessible parts of the African continent. And it would be rather absurd to deny the striking assimilation for instance between *Aletis dissoluta Gaede* (1 e) and *Xanthospilopteryx poggei* (Vol. XV, pl. 1 b) which fly together on L. Tanganyika. Here in Africa we meet with the same fact as in South America and India, that harmoniously coloured lepidoptera unite in occologically separated communities, for instance between *Aletis helcita* (1 e) and *Phaegorista similis* (Vol. XIV, pl. 17 b), the above mentioned *Xanthospilopteryx* and even Diurna (*Euphaedra ruspina*, *eleus*, Vol. XIII, pl. 42 b). Whilst this group externally approximates to the facies of the most common African lepidopteron, *Danais chrysippus*, the *Cartaletis* (e. g. *C. variabilis* [1 g]) seem to approach certain *Acraea* (from the *encedon* or *sganzini*-group), which again provides numerous lepidopterous species not being allied to each other with the same uniform, as for instance certain *Mimacraea*, *Secusio* and others. The relationships between the models and the copies are still obscure; but the discovery of the larva of *Aletis* by Lamborn has proved the latter to be very variegated and striped zebra-like, so that one might think of an internal protection; this assumption is also supported by the yellow juice emanating from the *Cartaletis* when squeezed. As the *Aletis* are systematically connected with the *Cartaletis* by transitions (*Aletis erici*), probably also their internal properties are not very divergent. We should therefore not wonder to see models in the Geometrids, if the protection of their doubles, the *Acraea*, had not been proved by way of experiments (especially by Marshall). Here in the Ethiopian region we find the parallel case to analogous phenomena in South America, where we see *Arctiidae*, *Ithomiinae* and *Pieridae*, which are mostly protected themselves, adapted to each other.

As in other old *Heterocera*-families, the degree of adaptation to the surroundings is likewise very complete in the *Geometridae*. The larva of the Abyssinian *Coenina dentataria* living on Nile-acacias shows on the dorsum fleshy, pointed, bent appendages which exactly represent the thorns of the food-plant. The larvae of *Rhodometra*, which is the most common and most widely — even in the deserts — distributed African Geometrid genus, resemble the stalks of leaves or blades in exactly the same way as most of the European smaller Geometrid larvae. The imagines exhibit the colours of yellowish-red stones and of grey, clayey parts of the soil, the more since trunks of trees, which might be used as resting-places, do not occur in those districts, as we mentioned above; on the other hand, straw-coloured, unmarked surfaces of the wings help to conceal the imagines resting on blades, especially if they keep their wings accordingly placed, as for instance the above mentioned *Rhodometra*, which sling their wings completely round the blade. In a similar way the straw-coloured *Euchlaena* take up such a position that they cling to small leaves which have turned yellow, and the great part of the common *Geometridae* of South Africa are adapted according to the type of our *Gonodontis*, *Colotois*, *Selenia* or *Crocallis*, representing dry and shrivelled leaves, as for instance the *Eupagia*, *Drepanogynis*, *Derrioides* etc.

On the whole, the *Geometridae* predominate nowhere in the Ethiopian region so much over the other *Heterocera* families as it is the case in the palaearctic (especially the eastern palaearctic) region. With very few exceptions, most of the African districts are almost entirely devoid of day-flying *Geometridae*; excepting the *Aletis* and *Cartaletis*, only the *Nathecusa Wkr.* are *Geometridae* spontaneously swarming in the daytime like the palaearctic *Aspilates*; all the others presumably fly in the daytime only when they are started up. But they have a light sleep and are therefore easily driven out of the brushwood.

Moreover, we cannot expect to find many peculiarities in such an old and equably distributed family as the *Geometridae* are, in their various patriae. In Africa there does not exist any connection with other lepidopteral families, since the first subfamily — the *Brephinae* — being still rather Noctuid-like is absent there. However, the few species of the *Oenochromine* genus *Petovia* (1 a) are to some extent allied to the *Brephinae* and may be a kind of junction to the Noctuids.

1. Subfamily: **Oenochrominae.**

For the general characters of this subfamily the reader is referred to Volume 4, p. 2 and Volume 12, p. 5. All the veins of the hindwing are developed, the costal (except in *Debos* and a few other genera) being free or connected with the subcostal by a bar near the base. The 2nd radial normally arises from the middle of the discocellulars, but in *Petovia* (which should perhaps be transferred to the *Hemitheinae*) it arises much more anteriorly. Only a few scattered genera are developed in the Aethiopian Region, the most noteworthy being the day-flying *Aletis* group.

1. Genus: **Debos** *Swh.*

Remarkable for having the 2nd—3rd subcostals long-stalked, widely separate from the 4th, raising some doubt as to whether it truly belongs to the *Geometridae*. Wings narrow, glossy, 2nd radial of the hindwing weak. Antenna of ♂ unipectinate. The type is Indian (see Vol. 12, p. 6, pl. 1 a). The only other known species, described below, differs from it in having the 1st subcostal of the forewing running into the costal and the costal of the hindwing anastomosing with the subcostal to about the middle of the cell, thus possibly calling for generic separation.

D. purpureofusa *Prout.* Expanse about 16 mm. Head and palpus orange-brown. Body and wings glossy dark brown or blackish, the wings shot with strong purple reflections — strongest costally on the forewing, abdominally on the hindwing and distally on both wings. Portuguese East Africa, only the type known. *purpureofusa.*

2. Genus: **Adesmobathra** *Prout.*

Aspect of *Ozola*, but with the costal vein of the hindwing closely approximated to the subcostal near the base and without a connecting bar. Face protuberant. Hindtibia of ♂ with the terminal spurs obsolete; ♀ with all spurs. Only one species. Nothing is known of the early stages.

A. ozoloides *Prout* (1 a). Similar to a pale, sharply-lined *Ozola microniaria Walk.* (Vol. 12, pl. 3 d) but broader-winged, with the apex of the forewing much less produced. White, with some brown dusting, the lines finely brown. Lindi, Tanganyika Territory. *ozoloides.*

3. Genus: **Afrophyla** *Warr.*

Palpus rather short. Antenna of ♂ bipectinate, with rather long branches. Legs long and slender; hindtibia with all spurs. Forewing with apex acute, 1st subcostal anastomosing with stalk of 2nd—5th to form an areole. Hindwing with costal vein closely approximated to subcostal near base, or even anastomosing, 2nd subcostal commonly stalked with 1st radial. Only one species known, exclusively African.

A. vethi *Sn.* (= dichordata *Warr.*) (1 a). White with rather strong grey-brown, ochreous-brown, or reddish-brown irroration, the lines of the forewing fine, sharply-expressed except at the costal margin, the gentle, regular curve of 2nd line characteristic. Angola, Uganda, Kenya Colony, Rhodesia, Transvaal, etc. I have also before me one example from Senegambia. — **meloui** *subsp. nov.* is more reddish (especially beneath) and has the cell-dots in general better developed. Hindwing less whitened, the line generally very indistinct. Madagascar: Diego Suarez, a good series in the Tring Museum, collected by G. Melou. *vethi.* *meloui.*

4. Genus: **Petovia** *Walk.*

Face smooth. Palpus minute. Tongue rudimentary. Frenulum wanting. Hindtibia with terminal spurs only. Venation altogether as in the *Hemitheinae*, to which Grünberg — perhaps with justification — proposed to remove it, but the genitalia, the coloration and scheme of markings and the larva do not suggest affinities in that direction. Exclusively African. Probably only a single, excessively variable species.

P. dichroaria, according to breeding experiences, certainly embraces a wide range of variation. The veins of the forewing are nearly always, those of the hindwing very generally, blackened, especially in the
equatorialis. distal part of the wing. — **equatorialis** *subsp. nov.* is rather large, at least in the ♀, rather deeply coloured, the border of the forewing broad anteriorly, that of the hindwing slight in the ♂, broad in the ♀. Hindwing black-veined. Buddu, W. shores of Victoria Nyanza, 3700—3800 feet, September 1911 (S.A. Neave) a good series
patris-aloysii. in coll. Brit. Mus. Also elsewhere in Uganda. — **patris-aloysii** *Grünb.* (1 a) has both wings more or less broadly black-bordered, the hindwing not or scarcely black-veined. Colour of forewing often paler, of hindwing lighter yellow. Ukerewe to N. Lake Nyasa. Variable, in parts of East Africa probably intergrading with the preceding. The few specimens which I have seen from Mount Mlanje, Nyasaland, can be provisionally placed with *patris-*
dichroaria. *aloysii*, though the veins of the hindwing begin to darken distally. — **dichroaria** *H.-Sch.* (1 a) has the black border narrow, the forewing generally suffused centrally, the hindwing strongly black-veined. South Africa,
marginata. perhaps commonest in Natal. — ab. **marginata** *Walk.* looks very different, lacking the black veins and central clouding, but has been bred from the same larva and the two forms have been taken in copula by Prof. Janse.
amatonga. — ab. (? subsp.) **amatonga** *Vuillot* only differs from the name-type in having the black borders slightly less
incertaria. narrow. Portuguese East Africa. — ab. **incertaria** *Gn.*(= perversaria *Gaede*) (1 a) is strongly suffused throughout with grey. — The larva of *dichroaria* is smooth, nearly cylindrical, with rather small, bilobed blackish head; body green, with narrow red, black-mixed dorsal belts on the anterior edges of the abdominal somites and a very thin, more or less interrupted spiracular line; spiracles black. On Combretum zeyherii (Janse, in litt.) or Vangueria infausta (Fawcett).

uniformis. **P. uniformis** *Warr.* is probably a narrow-winged aberration of the preceding, otherwise very similar to *marginata* and the name must perhaps supplant *patris-aloysii*. Nyasaland, only the type yet known.

5. Genus: **Derambila** *Walk.*

A genus of very frail white moths, of small size and with very long antennae and legs. Antenna in the ♂ ciliated (shortly in the African species). Hindtibia with terminal spurs only, and these generally minute. The Indo-Australian species have been divided into sections in Vol. 12, pp. 34—35. The African approximate to Sect. C — "hindwing with 2nd subcostal stalked" — but often the venation of the forewing is a little less specialized, the 1st subcostal merely anastomosing with the costal, not running into it. I formerly regarded this less specialized group (*syllaria*, *jacksoni*, *delostigma*, *puella*, *iridoptera* and *hyperphyes*) as a genus, under the name of *Corium*, but learned that the distinction was not in all species absolutely constant.

macritibia. **D. macritibia** *sp. nov.* (1 b). One of the largest species, the ♂ expanding 34 mm, the ♀ 35—40 mm. Antennal ciliation as long as diameter of shaft. Abdomen with blackish dorsal spots. Hindtibia of ♂ not — as in all the other species known to me — dilated. Forewing with cell long; the black cell-dot and terminal dots strong; the rows of dots nearly as black, the postmedian series more distally placed than in most of the species, quite as in *punctisignata Walk.* Underside only with cell-dot and terminal dots, and these reduced. São Thomé, 24 January to 25 February 1926, 2 ♂♂, 11 ♀♀ (T. A. Barns) in the Joicey Collection.

alucitaria. **D. alucitaria** *Sn.* (1 b). Only known to me from the description and the rather bad figure, from which it appears that the wings are even longer and narrower than in *thearia*, with the cells longer, the cell-spots (their colour not mentioned) placed well beyond the middle of the wing. Lines marked by indistinct vein-dots. Wing-expanse 22 mm. Founded on a single ♂ from Princes Island in the Gulf of Guinea. Perhaps a smaller relative of *macritibia*.

thearia. **D. thearia** *Swinh.* (1 b). A rather small species, narrow-winged, the apex of the forewing slightly acuminate, the abdomen (as in *alucitaria*) extremely long and slender. Recognizable by the rather large and distinct cell-spots, that of the forewing black, that of the hindwing brown. Nigeria, Cameroons and Gaboon. —
ansorgei. **ansorgei** *subsp .nov.* On an average slightly larger, the spots reduced in size, especially the cell-spots. Founded on 3 ♂♂ in the Tring Museum, collected by Dr. Ansorge at Nana Meya, Cugho River, N.Angola, 15 September 1903.

costipunctata. **D. costipunctata** *Warr.* Costal margin of forewing with a series of 8 or 9 minute but distinct blackish dots between the base and the postmedian line. Brown transverse markings rather large and strong. Cell-spot of forewing black, enlarged, extending along the base of the 2nd radial; that of hindwing wanting. Sierra Leone and Cameroons, apparently very rare.

D. punctisignata *Walk.* seems to be a very rare species, indeed Walker's type is not yet matched, though a rather larger and ample-winged example from Nandi approximates to it. Costal edge blackish, the black dots rather strong, the sinuous postmedian series more distally placed than in most of the other species. "West Africa.". *punctisignata.*

D. marginepunctata *Bastelb.* (1 b) "19 mm. Fore- and hindwings white, semitransparent, iridescent. Small black central dots on the cross-veins; a very fine black outer-marginal line, which is strengthened by black dots between the veins". Founded on a ♀ from Angola. *marginepunctata.*

D. synecdema *Prout* (1 b). Distinct from all the foregoing in the strong grey-brown costal shading (or dense irroration) of the forewing. Cell-dots small, but black or blackish, postmedian row of spots rather strong, grey-brown, not very deeply curved inwards posteriorly. Abdomen with black dorsal dots. Cameroons; similar forms also about Lake Mweru, in Uganda and Nyasa. *synecdema.*

D. thrombocnemis *sp. nov.* (1 c) is one of the smallest species and might at first sight be mistaken for a member of the Indian group of *saponaria Gn.* (Vol. 12, pl. 3 c), but has the ♂ hindtibia much more swollen proximally than in any other species, recalling the 1st tarsal joint of a *Celerena*, the ♂ antenna relatively stout, with the ciliation very minute, the distal margin of the forewing less oblique than in *saponaria*. Cell-dots and terminal dots small, black. The usual lines present but very weak, brownish-grey, punctiform. Diego Suarez, N. Madagascar, a good series in Tring Museum, collected by G. Melou. *thrombocnemis.*

D. sjöstedti *Auriv.* is only known to me from the figure and description and the venation is not given. Wing-expanse nearly 30 mm. Vein-dots connected by lines, which are nearly parallel with one another and with the distal margin. Cell-dots small, black. Face white. Mt. Meru, at an altitude of 3000—3500 m. *sjöstedti.*

D. syllaria *Swh.* (1 c). Apex of forewing not falcate; cell-dot of forewing even more minute than in *synecdema*, that of hindwing enlarged, somewhat angular; postmedian row of brown spots fairly large obsolescent in front of 1st radial of forewing, rather more deeply incurved posteriorly than in *synecdema*. Sierra Leone and Ivory Coast. *syllaria.*

D. jacksoni *Prout.* Costal margin of forewing more narrowly brown than in *synecdema* (1 b) and *syllaria* (1 c), cell-dots at least as small as in the former, transverse markings shaped as in that species but reduced to dots. Venation of *syllaria*, but with the 1st subcostal not anastomosing with the 3rd. Nairobi, only the type known. *jacksoni.*

D. delostigma *Prout.* Cell-spots nearly as in *syllaria* (1 c), brown costal edge and small transverse spots (dots) more as in *jacksoni*. Nyasaland. *delostigma.*

D. puella *Butl.* (= larula *Bastelb.*) (1 c). Expanse about 30 mm. Apex acute, termen of forewing straight, even that of hindwing less rounded than in the allies. Costal margin of forewing ochreous. Cell-dots very small, postmedian dots also small; traces of a greyish subterminal shade. Madagascar. *puella.*

D. iridoptera *Prout* (1 b). Distinguished by its extremely iridescent bluish-white wings, with the distal margin of the hindwing more rounded than in most of the allies. Antennal ciliation of the ♂ extremely short. Costal edge of forewing scarcely darkened; cell-dots and terminal dots small; postmedian dots even more minute than in *jacksoni* and *delostigma*, though slightly darker, their course little sinuate. Cameroons, French Congo, Kenya Colony and Nyasaland. *iridoptera.*

D. hyperphyes *Prout* (1 b) is the largest species, expanding about 43 mm. Distal margin of hindwing scarcely convex. Costal margin of forewing grey rather than brown; cell-dots moderate, black; terminal dots relatively large; postmedian vein-dots black, mostly not large; a dentate grey subterminal line. A mountain species, occurring on Mlanje Mountain, Nyasaland and the Aberdare Mountains, British East Africa. *hyperphyes.*

6. Genus: **Barrama** *Warr.*

Scarcely more than a section of *Derambila*, less attenuated, the wings not iridescent. ♂ antenna dentate, with fascicles of very long cilia. ♂ hindtibia not dilated.

B. impunctata *Warr.* (1 c). Apart from its shape, the brown-grey tinge distinguishes this species from those of the preceding genus. Moreover, the (feeble) postmedian line of the forewing is almost straight. Natal and Transvaal. *impunctata*

7. Genus: **Conolophia** *Warr.*

Face with projecting cone of scales. Palpus long, with 3rd joint well developed. Antenna rather long, ciliated. Hindtibia with all spurs. Venation nearly as in *Encryphia*, *Noreia*, etc. (see Vol. 12).

A. Section: ♂ hindwing normal.

aemula. **C. aemula** *Warr.*, from "S. Africa", unfortunately without nearer indication, seems scarcely distinguishable from *conscitaria* (1 c) except that the ♂ lacks the cone of scales on abdominal margin. I have it from Johannesburg.

B. Section: ♂ abdomen with hair-tufts on 5th and 6th somites; ♂ hindwing with cone of scales on middle of abdominal margin.

conscitaria. **C. conscitaria** *Walk.* (= smilodontaria *Sn.*) (1 c). Rather variable, but easily recognizable by the shape and structure. All forms show a rather strong dark irroration. The name-type has the ground-colour *maculata.* grey or slightly yellowish-grey. — ab. **maculata** *Bastelb.* (1 c) has a large black spot on the forewing beyond *rubrifusa.* the postmedian line, placed between the 2nd median and 2nd submedian veins. — ab. **rubrifusa** *Bastelb.* (1 d) *fasciata.* has the ground-colour reddish; the black spot of ab. *maculata* present or absent. — ab. **fasciata** *nov.* has the rows of black dots developed into strong thick lines or narrow stripes. Founded on a fine ♂ from Gillet Mountains, Somaliland, 1900—2200 m, 1 July 1900, taken by Erlanger and Neumann, now in the Tring Museum. *pontias.* — *conscitaria* is distributed throughout the greater part of Africa. — **pontias** *subsp. nov.* is white-grey with scarcely a tinge of brown or reddish, the black postmedian dots placed on a dark-brown line which is thickest at the hindmargins (though not so heavy as in *conscitaria* ab. *fasciata*) and becomes obsolete at the costa of both wings. Madagascar: Diego Suarez, 1 ♂, 2 ♀♀, collected by G. Melou.

recti- **C. rectistrigaria** *Rbl.* (= melanothrix *Prout*) (1 d). The ♂ is well characterized by the black tuft of *strigaria.* scales on the abdominal margin of hindwing. The largest *Conolophia*. Distal margin of hindwing appreciably bent in middle. Postmedian line rust-brown mixed with black, on the hindwing obsolete before the 1st radial. — *maculata.* ab. **maculata** *ab. nov.* has a black outer spot on the fold of the forewing and is about as common as the type form. Belgian Congo, Uganda and Kenya Colony.

persimilis. **C. persimilis** *Warr.* Abdominal tufts of ♂ more highly developed, scale-cone on abdominal margin less so; hindtibia tufted. Much like a large pale *conscitaria* (1 c); postmedian line well developed, though rather thin, *maculata.* placed as in *conscitaria* but (as in *rectistrigaria*) not reaching costa of hindwing. — *ab.* **maculata** ab. *nov.* has a black outer spot on the forewing as in the aberrations of *conscitaria* and *rectistrigaria* to which that name has been given. Range similar to that of *rectistrigaria*.

püngeleri. **C. püngeleri** *Bastelb.* (1 d). structure about as in *persimilis*. Face deeper red than vertex, almost blackish; palpus mixed with black. Rather variable, but much less pale than *persimilis*, more or less strongly reddish. Lines of forewing approximated posteriorly, accompanied by pale yellowish shading, the antemedian dotted or spotted with black on the veins. Hindwing with ill-defined grey subterminal spots, parallel with distal margin. The ♀ type shows an outer black spot as in *conscitaria* ab. *maculata*. Madagascar.

8. Genus: **Brachytrita** *Swh.*

Differs little from section B of *Conolophia*. Face without projecting cone of scales. Palpus shorter. Forewing with costal margin more arched. Hindwing somewhat more produced at anal angle. Erected for the single species.

cervinaria. **B. cervinaria** *Swh.* (1 d). Quite unmistakable among the African species, the bright cinnamon colouring recalling the species of the Indo-Australian genus *Alex*. The forewing shows, in addition to the oblique line, a characteristic, outwardly oblique dark mark from two-thirds of costal margin. Underside still brighter, almost orange, strongly marked. Widely distributed; known to me from the Ivory Coast, the Ca- *amara.* meroons and German East Africa. — **amara** *Prout* is a more brownish form from E. Madagascar.

9. Genus: **Panagropsis** *Warr.*

Also allied to *Conolophia* and *Brachytrita*; differing from the former in the pectinate ♂ antenna and in that the 2nd subcostal of the forewing anastomoses with the 3rd as well as with the first; from the latter in the long palpi. Both the known species are of smaller size than in those genera. South African.

equitaria. **P. equitaria** *Walk.* (= suberrata *Walk.*, humerata *Walk.*, secretata *Walk.*, platyrhyncata *Wllgrn.*) (1 d). An obscure grey-brown species, densely dark-dusted, the postmedian line indicated by dots placed parallel with the distal margin and accompanied by a pale line. The name-type has a dark spot near the anal angle of

the forewing. — ab. **secretata** *Walk.* is a weakly marked aberration with the dark spot wanting. — The species is only known to me from Cape Colony. *secretata.*

P. muricolor *Warr.* (1 d). Much less dusted than *equitaria*, postmedian line more distally placed, on the forewing more oblique than the distal margin, sometimes developed into a strong continuous dark line; the dark spot near anal angle and the terminal dots wanting. Natal and the Transvaal. *muricolor.*

10. Genus: **Apatadelpha** *Prout.*

Different from *Panagropsis* in shape, in having a better-developed frontal tuft, shorter ♂ antennal pectinations and absence of the bases of the first and second subcostal veins of the forewing, which consequently appear to arise out of the costal on a common stalk. Only the one species known.

A. biocellaria *Walk.* (1 e). Cannot be confused with any known species. The elongate reddish postmedian spot at the hindmargin of the forewing, outlined with black-brown dusting, is the most distinctive marking. The subterminal dots between the veins, placed near to and parallel with the distal margin, are also noticeable. Commonest in West Africa, ranging from Sierra Leone to the Congo, but I have also seen it from Victoria Nyanza and from the island of Fernando Po. *biocellaria.*

11. Genus: **Ozola** *Walk.*

The few African representatives of this genus — which is otherwise almost exclusively Indo-Australian and has been characterized in Vol. 12, p. 39 — form a separate section in that the hindtibia in both sexes wants the proximal spur and might on this ground be regarded as a separate genus. The entire habitus, however, and the characteristic venation (especially the very wide separation of the costal vein of the hindwing from the cell) indicate a really near relationship.

O. pulverulenta *Warr.* (1 c) resembles the two Ceylon species *microniaria* (Vol. 12, pl. 3 d) and *convergens* in shape and markings, the antemedian line of the forewing being angled in the cell nearly as in the former, the postmedian curved anteriorly and sinuate inward posteriorly, more as in the latter. Variable, generally with heavy grey irroration. — ab. **fasciata** *Warr.* has the median area filled-in with dull brown. — The species inhabits Rhodesia, the Transvaal, Zululand and Natal. *pulverulenta.* *fasciata.*

O. occidentalis *Prout* is somewhat narrower winged, with shorter antennal ciliation. Distal margin of forewing less sinuate, lines indefinite, postmedian of hindwing more oblique outward posteriorly. Described from the Cameroons, but I have since seen what may prove to be a race of it from Kenya Colony. *occidentalis.*

O. inexcisata *Fryer*, from Silhouette, Seychelles, is associated structurally with the Indo-Australian forms, having on the hindtibia a strong proximal spur. In size, coloration and narrowness of forewing comparable with *macariata Walk.* (Vol. 12, p. 40, pl. 3 d) or even *basisparsata Walk.*, but the distal margin not excised, the lines arising from costal spots. No subapical dark clouds. Hindwing with a row of submarginal spots nearly as in *convergens Warr.* Only the type known. *inexcisata.*

12. Genus: **Aletis** *Hbn.*

This genus and the following contain some of the largest and most conspicuous of the African *Geometridae*. They cannot possibly be confounded with any others of the family excepting *Mimaletis Warr.*, from which they differ in the development of the 2nd radial of the hindwing and the presence of an areole (single or double) in the forewing. They form, however, the centre of a mimetic association which embraces also butterflies (*Euphaedra*), Aganaids (*Phaegorista*), etc.

The smooth face, short palpi and the venation — excepting the wide separation of the costal of the hindwing from the cell, connected only by an oblique bar — suggest a possible relationship with the *Sterrhinae* and the Rev. C. R. N. Burrows considers the genitalia definitely Sterrhid; but the relationship cannot be very close. *Aletis* is differentiated from *Cartaletis* by having the areole generally double. The larvae have been made known by Dr. Lamborn and are transversely banded, alternately bluish-black and white, with the bands equal in width in *erici*, the black bands very much narrower in *helcita*, which, moreover, develops after the first moult some further blue-black marking; head and claspers in both species yellowish.

A. helcita *L.* (= macularia *F.*, druryi *Btlr.*, rubricaput *Swh.*) (1 e). Pectinations of the ♂ antenna extremely short. The white submarginal spots, both in this species and the following, are somewhat variable, but in *helcita* they are wanting behind the 2nd median vein of the forewing and sometimes on the 2nd subcostal of the hindwing. Very common in continental West Africa, extending from Sierra Leone to the Congo, also found on Fernando Po. — ab. **dissoluta** *Gaede* (1 e) has the black border of the forewing more curved round the *helcita.* *dissoluta.*

contractimargo. cell, the white subapical patch broken up into four spots. — **contractimargo** *Prout*, described from Uganda, known also from S. Sudan, has the black borders narrowed.

vicina. **A. vicina** *Gaede* may be an extreme form of *helcita*. Abdomen grey, not black, with the white spots more confluent. Forewing with the white subapical band about twice as broad as in normal *helcita*. S. Nigeria, Old Calabar.

erici. **A. erici** *W. J. Kirb.* (1 f). Extremely similar to *helcita*, sometimes of a slightly more orange-red. Antennal pectinations of the ♂ much less short, perhaps twice as long as the diameter of the shaft. White spot on front of thorax subobsolete. One or two additional white submarginal spots present on forewing behind the 2nd median vein. Larva gregarious, whereas the eggs of *helcita* are laid singly. The name-typical *euparypha.* form is from Uganda. — **euparypha** *Prout* is the western race (Congo to Gold Coast, about Lagos commoner than *helcita*), with the colour deeper orange, the black borders broader.

13. Genus: **Cartaletis** *Warr.*

Generally smaller moths than *Aletis*, the ♂ antenna more strongly pectinate, the areole invariably double. *Aletis erici* is, however, intermediate and it is doubtful whether the genus is tenable. The first three species are robust and constitute the typical *Cartaletis*. The rest are rather more slenderly built (genus *Leptaletis Warr.*). The moths are no doubt unpalatable; *libyssa*, when squeezed, emits a yellow juice, like an *Acraea*.

C. libyssa may be likened to a smaller, commonly less red, broad-bordered *A. erici*, with the proximal *libyssa.* edge of the border generally more direct. — **libyssa** *Hpff.* (1 f) is a rather large form, of a reddish tone, described from Mozambique, also found in Kenya and Tanganyika, especially the coastal regions, with the islands of *ethelinda.* Pemba and Zanzibar. — **ethelinda** *W. F. Kirb.* (= ? latifasciata *Gaede*) (1 f) is rather deeper red, the borders on an average broader and with larger white spots. Region of the Great Lakes, Kenya Colony to Nyasa, *nigriventris.* described from Parumbira, N. E. of Lake Nyasa. — ab. **nigriventris** *Gaede*, from Kilimandjaro, has the lateral *monteironis.* white spots reduced, the venter smoky instead of orange. — **monteironis** *Drc.* (1 f) is a paler, more yellowish *concolor.* race, common at Delagoa Bay. — Larva whitish grey with black belts; on *Oxyacanthus monteiroi*. — **concolor** *Warr.*, from Zululand, is smaller than *monteironis*, at least as pale, the proximal edge of the black border of the forewing perhaps straighter, the abdomen beneath pale straw-colour, not orange as in the other forms.

natalensis. Like the following race, it is inclined to lose the hindermost submarginal spot of the forewing. — **natalensis** *Prout* (= libyssa *auctt.* nec *Hpff.*) is a rather deep red-orange form, with broad black borders. Smaller than *fusciventris.* *libyssa*, altogether similar to *concolor* except in colour. Natal, Griqualand and Pondoland. — **fusciventris** *Gaede*, from Johannesburg, is probably an aberration of *natalensis*, parallel to *libyssa* ab. *nigriventris*.

melanopis. **C. melanopis** *spec. nov.* (1 g). Face black (in *libyssa* at least mixed with buff, often purely buff). Pectinations not quite so long as in *libyssa*. Forewing with costal edge extremely narrowly black; black apical patch less broad than in *libyssa*. Hindwing with the black borders narrow, the enclosed white dots small. Ruanda district, Lake Kivu: Rugege Forest, 8000 feet, December 1921, the type ♂; Kabira Forest, 12 miles N. of Usambara North, 7000 feet, January 1924, 1 ♂; both in coll. Joicey, collected by T. A. Barns.

nigricosta. **C. nigricosta** *Prout* is as pale as *concolor Warr.* and similarly marked, but with the costal margin of the forewing black as far as the subcostal vein; the black border anteriorly obliquely margined. Only known from Mt. Mlanje, Nyasaland.

tenuimargo. **C. tenuimargo** *Prout* is a smaller species, of an ochraceous-rufous colour, the forewing slightly broader than in the allies, with its black border very narrow posteriorly, terminating at the fold, the border of the hindwing very narrow and not containing any white spots. Kwidgwi Island, Lake Kivu.

sapor. **C. sapor** *Drc.* (1 g). Much like a diminutive *Aletis helcita* (1 e), more slenderly built, of a more orange-red colour, the hindwing with very narrow black border, containing very small white spots. The white spots on the forewing also generally small. Cameroons. Also known from S. Nigeria. Probably this and the two following will prove to be forms of one excessively variable species.

forbesi. **C. forbesi** *Drc.* (= flexilimes *Warr.*) (1 g). Differs in its light orange-yellow colouring and less narrow borders, with larger white spots. Lower Niger (loc. typ.), Cameroons, Gaboon and Congo.

variabilis. **C. variabilis** *Btlr.* (1 g) combines the colouring of *forbesi* with the narrow borders of *sapor*. Described from Angola, but forms from the Congo seem to intergrade with *forbesi*. Also known from the Cameroons and *agis.* Uganda. — ab. **agis** *Drc.* is yellow at the bases and on abdominal region of hindwing, then white, with black *ampliflava.* apex and with narrow black borders which project inwards between the veins. — ab. **ampliflava** *Warr.* has large, *thestis.* irregular white blotches in the distal part of the yellow area. — **thestis** *Drc.* is probably also a mere aber-

ration, on the forewing with a white patch in end of cell, broadening thence to the submedian vein and anteriorly irrorated with black. Kassai district, only the type known.

C. gracilis *Mschlr.* (= pallida *Warr.*, alba *Drc.*) (1 g, h). Likewise very variable. Ground-colour white. Forewing with a small buff or slightly reddish patch at base and a black costal border in addition to the usual white-spotted distal one. Hindwing with characteristic black wedge-shaped terminal marks between the veins, which are otherwise only known in *variabilis* ab. *agis*. The ♂♂ have usually a tawny spot in the border of the forewing which is obsolete in the ♀. Gold Coast, and extending through Ivory Coast to Sierra Leone. — **variegata** *Prout* has the basal patch of the forewing extended, reaching the costal margin, the median vein blackened, in the ♀ also an irregular, more or less extended, reddish area along the costal and thence across the wing between the white and black parts. Ja River, S. Cameroons, fairly common. — **landbecki** *Prout* is marked nearly as *variegata* but with the variable reddish parts replaced by buff. Apparently a well-defined local race in the Kassai district, Belgian Congo. *gracilis.* *variegata.* *landbecki.*

14. Genus: **Paraptychodes** *Warr.*

A small genus, of doubtful position, placed here on account of its mimetic association. The type species is said to mimic *Danaida chrysippus*. The ♂ characters which (in Gen. Ins. 104, p. 101) I quoted from Warren are partly incorrect; the hindtibia in both sexes has 4 short spurs. Legs short. Antenna short and stout, in both sexes (excepting the ♀ of *costimaculata*) bipectinate. Cells long, forewing without areole, 1st subcostal free, 2nd connected by a bar with the stalk of 3rd and 4th. ♂ hindwing with the abdominal margin closely folded over beneath, clothed with specialized scaling. Early stages unknown. The genus is confined to Tropical Africa.

P. kedar *Drc.* (1 h). Forewing white, with black apical half containing a white subapical patch. Hindwing with narrow black apical patch; distal border forming black triangles on the veins. Dar-es-Salaam; also known from Mombasa. *kedar.*

P. costimaculata *Prout* (1 h) is a large species, of similar coloration to the following, but with a costal black spot at nearly one-third, the white subapical patch larger, the ♀ antenna not pectinate. Southern Nigeria. Also on the coast of Kenya Colony. Evidently much overlooked. *costimaculata.*

P. tenuis *Btlr.* (1 h) Orange with narrow black borders, on the hindwing broken into vein-spots posteriorly. Forewing with a black cell-mark, succeeded by a large white subapical patch. — ab. **fulva** *Hmps.* has the posterior terminal spots of the hindwing wanting. — ab. (?) **perfulva** *Prout* has the subapical spot orange, not white. — Zanzibar; also from the coastal districts of East Africa from Mombasa to Dar-es-Salaam and perhaps Mozambique. *tenuis.* *fulva.* *perfulva.*

15. Genus: **Diptychis** *Warr.*

An anomalous genus, originally assigned by Warren — on account of its colour and maculation — to the vicinity of *Abraxas*, afterwards assumed by me to be a Larentiid with some slight affinity to *Ptygmatophora* (Vol. 4, p. 189) but apparently better placed near *Paraptychodes*. Palpus rather short. Antenna not pectinate. Hindtibia in both sexes thickening in distal half, all the spurs present, but short. Both wings with the cell long; forewing with the venation nearly as in *Paraptychodes*; hindwing with the costal vein anastomosing with subcostal to about the middle of the cell, the 1st radial widely separate from the 2nd subcostal, the abdominal margin of the ♂ folded over beneath to form a pocket containing coarse androconial scaling.

D. geometrina *Feld.* (1 h). Orange, with a large black cell-spot on the forewing, terminal spots on both wings and irregular and very variable maculation elsewhere, more copious on the forewing. Felders type was from Natal; other localities are Zululand and Pondoland. *geometrina.*

D. meraca *Prout* is unicolorous orange; cell of forewing rather less long than in *geometrina*, distal margin stightly more rounded anteriorly; hindwing with the 2nd radial weaker. Fez, S. Mozambiqua, 1 ♀ in Mus. Geneva. *meraca.*

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2. Subfamily: **Hemitheinae.**

This subfamily, which has been discussed in its relation to the Indo-Australian fauna in Vol. 12, pp. 3 and 44, is also moderately well represented in the African region, but chiefly by small species. A very large proportion of these shows a very simple pattern — plain green without markings or merely with one or two

white lines. In order to determine them correctly, it is often therefore necessary to give careful attention to the structural characters; the figures alone, although giving valuable help as regards the shape of the wings and their tone of colour, cannot furnish all the needed clues.

Apart from the remarkable prevalence of green colouring, the subfamily is nearly always recognizable by the presence of all the veins of the *Macrolepidoptera* with the 2nd radial arising close to the first, or in any case well before the middle of the discocellulars. Only in a few very specialised genera, such as *Acidaliastis*, has it reverted to a more central position; these are to be distinguished from *Sterrhinae* (formerly called *Acidaliinae*) and *Larentiinae* by the subcostal venation of the forewing, etc.

The more primitive *Hemitheinae*, in which the coloration is adapted to treetrunks or rocks, are very weakly represented in the region, chiefly by a few stragglers of the genus *Pingasa*. On the other hand a few highly specialised species — in *Prasinocyma*, the *Hemithea*-group, *Acidaliastis*, etc. — have adopted a sandy coloration which is extremely rare or unknown in the other faunistic regions.

In the earlier genera (*Pingasa* to *Archichlora*) the frenulum is developed in both sexes, though in *Victoria* and *Archichlora* it begins to weaken in the ♀. In the group from *Metacineta* to *Xanthodura* it is wanting or non-functional in the ♀, unless perhaps in that of *Epigelasma*. In the last group (*Cacochloris* to *Acidaliastis*) it is wanting in both sexes.

1. Genus: **Pingasa** *Moore*.

Relatively large moths, with the white or whitish-green ground-colour heavily dusted with different shades of grey which give them a cryptic upperside; the underside cleaner white, but commonly with conspicuous black borders and with more or less orange colour proximally. Palpus (as in very many of the subfamily) with the 3rd joint much longer in the ♀ than in the ♂. Antenna in the ♂ very shortly pectinate, in the ♀ simple. Hindwing in the ♂ narrowed, in both sexes with abdominal margin elongate; 2nd subcostal not stalked with 1st radial. Scarcely known outside the Indo-Australian Region and Africa.

floridivenis. **P. floridivenis** *Prout*. Distinct from all other African species in the bright ochreous admixture in the distal area of both wings and the proximal of forewing, the veins in these areas particularly bright. Underside with black borders rather broad, white-spotted distally; base bright yellow; cell-spot large. Founded on a single specimen from A'koon, Gold Coast.

ruginaria. **P. ruginaria** (vol. 12, pl. 5 f) is the most widely distributed species of the genus. The name-typical race, as described by Guenée, belongs to the Indo-Australian Region (s. vol. 12, pl. 5 d). The species is best recognized by the marked outward curve in the middle of the postmedian line and this line is less dentate than in most of the *commutata.* species. — **commutata** *Walk.* (= batiaria *Plötz*) (2 a), described from Sierra Leone and extending to the Congo, is very variable, but can generally be distinguished from *ruginaria* by the less highly coloured upperside, the borders being more olive or grey-mixed than reddish or purplish. Basal orange-yellow of underside moderate. *decristata.* — **decristata** *Warr.*, from São Thomé, has the borders of the upperside still paler — light blue-grey, the underside *communi-cans.* yellow as far as to the black borders. — **communicans** *Walk.*, from Natal, is also variable. Underside with the dark borders commonly more broken, the yellow at base more restricted, on the hindwing chiefly limited *interrupta.* to the costal region. I have seen a similar form from Nyasa. — **interrupta** *Warr.*, from Rau, Nandi Country, is an extreme development ("dry" form ?) of *communicans*, with the border of the hindwing beneath weak, broken into two quite isolated patches. The British Museum has a similar example from Kilimandjaro.

grandidieri. **P. grandidieri** *Btlr.* (2 a) represents *ruginaria* on Madagascar. Forewing with 1st line much straighter, 2nd also with the outward curve slighter; this line, especially on hindwing, commonly more dentate. Underside *eugra-pharia.* with little yellow at base. — ab. **eugrapharia** *Mab.* has the borders above more grey, less reddish.

hypoxantha. **P. hypoxantha** *Prout* (2 a). Possibly an extreme, "dry" form of *ruginaria*. Much paler, the borders above scarcely noticeably darkened. Antemedian line of forewing twice angled outward, postmedian oblique outward from costa to 1st radial, the median area nearly twice as broad anteriorly as posteriorly. Underside more or less extended yellow proximally, the black borders incomplete, chiefly apical. Nandi Country; also *holochroa.* Belgian Congo. — **holochroa** *Prout* is a form with the borders beneath complete, though rather narrow, the rest of the under surface yellow. Upper Congo.

rhadamaria **P. rhadamaria** *Guen.* (= signifrontaria *Mab.*) (2 a). Another variable species, whitish like the preceding, from which it chiefly differs in the absence of yellow at base beneath. Antemedian line less sharply angled, postmedian less distally placed at costa, both rather sharply blackened at costa. Borders beneath commonly *rufifascia.* broken into quite isolated spots. Madagascar. — ab. **rufifascia** *ab. nov.* has a narrow red subterminal band *attenuans.* on both wings. — **attenuans** *Walk.*, from scattered localities in W. Africa, has the black borders better developed *alterata.* but is otherwise weakly marked. I cannot separate from it a single ♂ from Bahr-el-Ghazal. — **alterata** *Walk.*

(= victoria *Prout*) is larger than the other races, rather sharply marked, the borders beneath sometimes as in *rhadamaria*, sometimes as in *attenuans*. The shape of the postmedian line sometimes inclines towards that of *ruginaria*. Described from Natal, but reaches Kenya Colony. My *victoria*, from S. Rhodesia, seems to be a ♀-ab. — **signifrontaria** *Mab.*, from the Comoro Islands, common also at Diego Suarez, is a small form, often as weakly marked as *attenuans*, the marginal spots beneath often narrowly connected proximally. *signifrontaria.*

P. pallidata *Joan.* is unknown to me. From the description I should have supposed it to be a small, pale specimen of the following, perhaps with the postmedian line less deeply dentate. Eritrea. *pallidata.*

P. abyssiniaria *Guen.* (2 a). Rather variable in colour, whitish or pale olive-green or even pale fleshy (perhaps, as with the European *Pseudoterpna pruinata*, a result of moisture) but constant in the highly dentate postmedian line and the suppression of the black borders beneath, only a feeble costal mark on the forewing at most remaining. Fairly common from Abyssinia to the eastern part of Cape Colony. I am informed by Prof. Poulton that the larva bears a remarkable resemblance to a little, green grass-snake. — **respondens** *Walk.* is a more heavily dark-irrorated form prevalent about Cape Town and perhaps to Knysna. *abyssinaria.* *respondens.*

P. hypoleucaria *Guen.* is cleaner white, the cell-mark of forewing wanting, the postmedian line less bent outward in middle, less deeply dentate. Reunion. Only known to me in one ♀ from Mauritius. *hypoleucaria.*

P. lahayei *Oberth.* (Vol. 4, p. 11, pl. 1 g) is represented in Gambia by f. **austrina** *Prout.* (5 a) with rather larger and browner spots on the underside. *lahayei.* *austrina.*

P. recognita *Saalm.*, (2 b). according to the figure, is considerably smaller than the other species, brownish, the cell-marks scarcely elongate, the lines lunulate-dentate, not very sinuous, the postmedian accompanied distally by a row of small spots. Madagascar. Possibly a small *Mimandria*. *recognita.*

2. Genus: **Mimandria** *Swinh.*

Distinguished from *Pingasa* by the atrophied tongue and by having the antenna pectinate in the ♀ as well as in the ♂. S.E. Africa and Madagascar.

M. insularis *Swinh.* (2 b). Greenish, easily fading to flesh-colour; outside the lunulate-dentate postmedian line stands a row of red spots between the veins. Underside greyer, without the red spots. Madagascar. *insularis.*

M. cataractae *Prout* (5 a). Closely related to the preceding, the wings more elongate, recalling an *Epipristis*. Whitish-grey, with darker grey and brown irroration, the outer spots much less complete than in *insularis*, brown rather than red. Victoria Falls, Rhodesia. A larger ♀ from Pretoria North (Transvaal) probably belongs here. *cataractae.*

3. Genus: **Synclysmus** *Btlr.*

Face and vertex more rough-scaled than in most *Hemitheinae*. Antenna in both sexes pectinate. Thorax and abdomen crested. Hindtibia in both sexes swollen distally, with terminal spurs only. Hindwing elongate, as in *Mimandria cataractae*, but paler or with less markings than the forewing. Endemic on Madagascar.

S. niveus *Btlr.* Both wings white, though not quite pure. Markings of forewing blackish, consisting of an incomplete, very oblique subbasal line, an oblique antemedian, bent inwards between the fold and submedian vein, an indistinct, dentate postmedian and a row of terminal spots. *niveus.*

S. nigrocristatus *Prout* (2 b). More irrorated with brown, tornal dots weaker, hindwing perhaps more rounded about the median veins, its postmedian line more nearly obsolete. N. Madagascar, fairly common about Diego Suarez. *nigrocristatus.*

4. Genus: **Xenochroma** *Warr.*

An offshoot of *Synclysmus* with smoother face, less strong crests, differently shaped wings with simpler pattern or with none, in either case with both wings coloured alike. Leg structure as in *Synclysmus*.

X. candidata *Warr.* White, almost without markings; the face red. Distinguished from the other species by having the hindwing angled at the 1st median vein. Antenna in ♀ pectinate. Described from Kilwa, Tanganyika Territory. Known also from Nigeria and from Portuguese East Africa. *candidata.*

X. planimargo *Prout* (2 b). Apart from the difference in shape, this equally white species may be known from *candidata* by the ♀ antenna, which is only weakly serrate, not pectinate. Nyasa and Rhodesia. *planimargo.*

X. salsa *Warr.* (2 b) Very distinct in being irrorated and banded with bluish green and with elongate green discocellular marks. ♀ antenna pectinate. Sierra Leone (loc. typ.), Gold Coast and Nigeria. *salsa.*

dyschlorata. **X. dyschlorata** *Warr.* (2 b), the type of Warrens superfluous genus *Campsiceras*, is again very distinct, being irrorated with rose-pink, the forewing with 2 lines of that colour, the hindwing with 1. Antenna of ♀ serrate. Zululand, also from Rhodesia and Nyasa.

5. Genus: **Agathia** *Guen.*

This beautiful genus of bright green moths, with band-like purplish markings, belongs chiefly to the Indo-Australian fauna and will be more fully discussed in Vol. 12; see also Vol. 4, p. 14. This and the following are the only African representatives of a group of green genera with the frenulum fully developed, the 2nd subcostal vein of the hindwing not stalked, the venation of the forewing normal, the margins of the hindwing generally angled. The few African species of *Agathia* are considerably smaller than most of the Indian and show in its full development a ♂ structure which is also present in many of the Indo-Australian species, though not in all; namely a large tuft of densely compacted scales on the underside of the median vein near the base, overhanging a considerable part of the cell.

pauper. **A. pauper** *Warr.* (2 c) is known from the other species by the n a r r o w bands, the sexes alike. Nigeria (loc. typ.), Cameroons and Congo.

elenaria. **A. elenaria** *Swinh.* has a similar range to the preceding. On the forewing the antemedian line is slender, W-shaped, the postmedian band separated from the distal margin by an almost uninterrupted band of the ground-colour nearly to the tornus. Perhaps merely a form of *confuscata*.

confuscata. **A. confuscata** *Warr.* Postmedian band broader, from the 2nd radial hindwards reaching the distal margin. Sierra Leone and probably Ivory Coast.

multiscripta. **A. multiscripta** *Warr.* (= minuta *Druce*) (2 c). Perhaps another form of *confuscata*, the antemedian band broad and irregular, continued in the hindwing, the postmedian band very broad, in places reaching the distal margin, but interrupted with spots of the ground-colour. Ivory Coast to Belgian Congo, the type from Nigeria.

6. Genus: **Paragathia** *Warr.*

Differs in both sexes from *Agathia* in that the antennae are pectinate, whereas those of *Agathia* are simple. Only one widely-distributed and not variable species is known.

albimarginata. **P. albimarginata** *Warr.* (= delicia *Th.-Mieg*) (2 c). The purple markings, which — except in the strong development of a slender curved antemedian of the forewing — recall those of the wellknown *Agathia laetata F.*, are elegantly edged proximally with white. Senegambia, Ivory Coast, Congo, Kenya Colony to Transvaal.

7. Genus: **Victoria** *Warr.*

Tongue wanting or vestigial. Antenna short, pectinate in both sexes. Abdomen crested. Frenulum developed. Hindwing with 2nd subcostal stalked, sometimes also the 1st median. Shape and scheme of markings somewhat variable, the hindwing always more or less toothed at the 1st and 3rd radials. All the species are African, mostly among the largest and most attractively coloured of the green African *Hemitheinae*.

sematoperas. **V. sematoperas** *Prout* is the smallest *Victoria*. It and the following are characterized by pale-centred cell-rings and violet-grey terminal blotches in front of the 3rd radial and again at tornus. In *sematoperas* those of the hindwing are very small, the anterior one on forewing tapers anteriorly, just crossing the 5th subcostal. British Somaliland.

triplaga. **V. triplaga** *Prout* is larger and broader winged, the hindwing still more weakly toothed, both wings with much larger cell-ring and with an additional blotch on hindmargin proximally to the middle. Mhonda, *sphrigon.* Tanganyika Territory. — **sphrigon** *form. nov.* (2 c) has some strong reddish clouding in posterior part of forewing and proximal part of hindwing and shows a sinuous, in part punctiform, postmedian line, which does not reach the costa. Mazoe, Southern Rhodesia, 1 ♀ in coll. L. B. Prout.

immunifica. **V. immunifica** *Prout* (2 c) is the least ornate species of the genus, green with the cell-spots, costal margin and terminal line red mixed with black. Found sparingly from Gambia to Southern Nigeria, the type from Sierra Leone.

barlowi. **V. barlowi** *Prout* is perhaps a race of the preceding. Face more ochreous, crown of head green, not red. Costal edge of forewing narrowly ochreous instead of broadly red. Zomba Plateau, Nyasa.

V. gordoni *Prout* (2 c) differs from *immunifica* in the more deeply toothed termen, darker green borders (enclosing some pale spots) and especially a large deep-brown patch at anal angle of forewing. Described from Old Calabar, since seen from Gold Coast, Cameroons and North Angola. *gordoni.*

V. perornata *Warr.* (2 c) is distinguished by having a median white band (on the hindwing abbreviated), followed distally by an ill-defined brown-grey band; some white subterminal spots. Nigeria. *perornata.*

V. albipicta *Warr.* The type of the genus, which should perhaps be restricted to this form and the two that follow. They are very closely related and are characterized by a tuft at the base of the antenna. *albipicta* has the forewing green, with the white lines broadening posteriorly and with white distal spots; thorax green above. Cape Colony. *albipicta.*

V. **fuscithorax** *Warr.* (2 d) differs from *albipicta* in the dark thorax and the broader white markings. Known from Sudan to Rhodesia and even from Senegambia, but everywhere rare. — **mirabilis** *Warr.*, from Natal, is probably a race of the same species. Costa dark-mixed, base of forewing whiter, cell-spot larger, triangular distal white patch at hindmargin of hindwing less developed, etc. I have seen a somewhat intermediate example from Nyasaland. *fuscithorax.* *mirabilis.*

8. Genus: **Archichlora** *Warr.*

Similar in build to *Victoria*, from which it differs chiefly in the short palpus, that of *Victoria* being of moderate length, with the 3rd joint elongate in the ♀. The tongue is present, though generally slender. Frenulum of ♀ weak. Exclusively African.

A. pulveriplaga *Warr.* (2 d). A rather large species with ill-defined zigzag white lines and with terminal white, grey-dusted blotches; those of the forewing very large, especially the one at the tornus, which reaches nearly to the cell-spot. Nigeria. *pulveriplaga.*

A. ansorgei *Warr.* is a little smaller, slightly broader-winged, with the white markings much reduced in size. Toru, Uganda, only the type known, perhaps merely an aberration or local race of *pulveriplaga*. *ansorgei.*

A. marginata *Warr.* (= phyllobrota *Holl.*) (2 d). Antennal pectinations less short than in the two preceding. Shaped nearly as *ansorgei*. Bright green. Costal margin of hindwing rather broadly white. The white lines generally present, the postmedian very proximally placed. The white, partly irrorated blotches are bandlike, arising at tornus, running towards — but rarely reaching — the costa. A dark red, black-mixed spot close to tornus of hindwing. Nigeria, Ivory Coast, Sierra Leone. *marginata.*

A. marcescens *Warr.* (2 d) is possibly an aberration of *viridimacula*, the pale parts redder, the green patches broader. Described from Nigeria, but reaching Sierra Leone. *marcescens.*

A. viridimacula *Warr.* (2 d). The most widely distributed of the group and rather variable. Whitish, suffused with flesh-colour, the bright green patches arranged as shown in our figure, a small green distal spot between the median veins constantly present. The broader terminal patches and the pale base of the hindwing always distinguish it from *marginata*. Distributed in West Africa (the type from Nigeria), known also from Uganda, Upper Congo, Nyasa and Usambara. *viridimacula.*

A. devoluta *Walk.* (2 e). differs from the preceding group in several respects and was placed by Warren in a separate genus *Chloroteras*. Palpus extremely minute. Both wings with the termen crenulate, the forewing angled at the 3rd radial, the hindwing toothed at the 1st and 3rd radials. Characteristic is the extremely sinuous postmedian line of the forewing, followed in its posterior half by a white patch. Sierra Leone to Old Calabar. *devoluta.*

A. trygodes *Prout* has a similar palpus to *devoluta* (2 e) but is much smaller, more thinly scaled, recalling *Trygodes musivaria H.-Sch.* from South America. 1st median vein not stalked. A green spot in middle of cell, partly confluent with a more proximal one posteriorly, the forewing in addition with two smaller ones between the cell and the distal margin. Madagascar: Diego Suarez. *trygodes.*

A. engenes *Prout* (2 e). Similar in structure to *trygodes*. Antennal pectinations of ♂ long. General aspect of a *Bathycolpodes*, the coloration of the upperside recalling *B. subfasciata Warr.*, the wing-shape and underside more as in *B. anisotes*. Madagascar: Diego Suarez. *engenes.*

A. chariessa *Prout* (2 e). Near *engenes*, the face more mixed with red, forewing with costal border paler and with an antemedian pale patch on hindmargin, hindwing with less strong tooth at 1st. radial; distal borders less irregularly bounded. Mountains of Central Madagascar. "*Phorodesma*" *hemistrigata* Mab. (1900), unknown to me, may be another related Madagascar species. *chariessa.*

zonata. **A. zonata** *Walk.* perhaps forms a separate genus, differing in venation — 1st subcostal of forewing anastomosing strongly with costal and 2nd subcostal (in the other species free), costal of hindwing approximated to subcostal to middle of cell, both wings with 1st median not stalked. Further characterized by the darkgreen colour, broad purple borders, irregularly swelling in the middle, and the purplish suffusion of the entire underside. Caffraria, Natal and N. Rhodesia, very rare.

9. Genus: **Metacineta** *Prout*

Palpus in both sexes short. Antenna in both sexes pectinate. Abdomen with small crests. Forewing rather broad, the 2nd subcostal vein stalked to far beyond the origin of the 5th; both wings with 1st median well separate. All the forms are very closely allied and as some are certainly variable it is at present impossible to determine the number of separate species.

vernicoma. **M. vernicoma** *Prout* has no red spots excepting the small cell-dot and no white dots at ends of veins. Fringes with a fine interrupted red line at base and with red spots at the ends of the veins. Southern Nigeria.

aggravaria. **M. aggravaria** *Guen.* (= rhodosticta *Hmps.*) (2 c). Is a variable species, though the red (or purple) terminal line and spotted fringes remain constant. The typical form has moderately large red cell-spots and on the forewing a moderate purple-red postmedian patch between the 3rd radial and 2nd median vein. The type locality is unknown, as Guenée cited "Cayenne"? but I have seen such examples from the coastal regions of Kenya Colony as well as Nyasaland and Rhodesia (*rhodosticta Hmps.*) — *intermaculata.* **intermaculata** *Warr.*, from Senegal, has the markings larger and more purple, the costal margin mixed with purple. — *rubella.* **rubella** *Warr.* has the markings smaller and lighter red, the costal margin cream-buff. S. Damagarim and Nigeria. — *semialbifrons.* in ab. (?) **semialbifrons** *Prout* the red postmedian patch vanishes altogether. I have only seen ♂♂, and now suspect it may be the usual ♂-form. French Congo and Nigeria. — The species has a wide range in Tropical Africa and extends to Southern Rhodesia.

rufomarginata. **M. rufomarginata** *Pagenst.* is unknown to me, perhaps the same as *aggravaria*, but as it was described as a "*Thalassodes*" and the shape is not given, nor the position of the small reddish brown spot above the hind angle of the forewing, it remains somewhat doubtful. Quilimane.

10. Genus: **Comibaena** *Hbn.*

This genus, apart from the larval habits (see Vol. 4, p. 19), is characterized by the elongate, heavily-scaled palpus and nearly always by a long terminal process to the ♂ hindtibia. In coloration the species are often very similar to *Metacineta*, but the antenna of the ♀ is rarely pectinate, though that of the ♂ has always long branches, and the 2nd subcostal vein of the forewing nearly always — I think always in the African species — arises before the 5th.

A. Hindtibia with 4 spurs. Antenna of ♀ not pectinate.

longipennis. **C. longipennis** *Warr.*, of which only the type ♂ is known, seems to differ from the following in having the distal margin of the hindwing less rounded, the tornus consequently produced. I suspect, however, that it is only a "sport"; for the ♂♂ of *esmeralda* have always the hindwing decidedly narrower than the ♀♀. Degama, Niger.

esmeralda. **C. esmeralda** *Warr.* (2 e). Green, scarcely at all strigulated with white, the white lines placed as in *leucospilata Walk.* (2 e) but much fainter, the dark red terminal line not or scarcely interrupted with white dots at the veins. Fringes less sharply spotted than in the allies. Hindtibia of ♂ with terminal process almost as long as 1st joint of tarsus. Senegambia to Gaboon, the type from Nigeria. Perhaps also in Uganda.

rhodolopha. **C. rhodolopha** *Prout* is slightly more strigulated with white than *esmeralda*, the lines wanting. Cell-spots rather large. Foretibial tuft red (in the allies brown). S. Rhodesia. Also from Nyasaland.

rufitornus. **C. rufitornus** *Prout* (2 e). More strigulated with white than the allies, the purple-red terminal line broadening at tornus, especially on forewing. The white fringes very sharply marked with triangular red spots. Nairobi, Kenya Colony.

leucospilata. **C. leucospilata** *Walk.* (= coryphata *Feld.*) (2 e). Bright green, a little strigulated with white, the slender white lines distinct, the terminal line not or scarcely broadening at tornus. Hindtibia of ♂ with terminal process about half as long as 1st joint of tarsus. Fairly common in South & East Africa.

barnsi. **C. barnsi** *sp. nov.* Expanse 31 mm. Palpus 1¾ times as long as diameter of eye. Crown green, with a slender white line in front. Antenna greenish; the pectinations long. Abdomen above with a red spot on first two segments. Light bice-green, the forewing with an ochre-red spot at tornus, about 2.5 mm in diameter

the hindwing with a similar spot at apex, thus more like *fuscidorsata Prout* from India than any other African species, the spots brighter red, none at anal angle of hindwing. The 2nd subcostal of the forewing arises distally to the 5th. W. Kivu: Upper Lowa Valley, near Masisi, 5000—6000 ft. altitude, forest and long grass, February 1924 (T. A. Barns), the type ♂ only known (in coll. Joicey).

C. punctaria *Swinh.* (2 f), from Madagascar, is a small species differing from all the others in having the cell-spots ocellated (dull red with white pupils), the lines broken up into white dots, a row of large white terminal dots an the veins. *punctaria.*

B. Hindtibia with 4 spurs. Antenna of ♀ pectinate.

C. hemictenes *Prout.* Very much like *esmeralda* and *leucospilata* (2 c) but with the terminal line swelling at the hind angle of the forewing and at apex of hindwing. Antenna of ♀ with very short pectinations. Ivory Coast. *hemictenes.*

C. flavitaenia *Warr.* has the white lines distinct, almost parallel (in the *leucospilata* group diverging anteriorly), the terminal line simple and slender, the fringes white or creamy. Antenna of ♀ with moderate pectinations. Nigeria. Also known from Gold Coast, French Equatorial Africa and the Cameroons. — **biviaria** *Hmpsn.* (2 f), founded on a single ♀ from Ruwenzori, is an aberration, or at most a local race, with the white lines broader; the terminal line wanting, the fringe purer white than in typical *flavitaenia.* *flavitaenia.* *biviaria.*

C. leucochloraria *Mab.* (2 f) is a beautiful and unmistakeable species, with the postmedian line continued on the hindwing, on both wings curved inwards posteriorly, the distal area mixed with white. Madagascar. *leucochloraria.*

C. Hindtibia with 2 spurs (gen. div.?).

C. pulchra *Stgr.*, described and figured in Vol. 4, p. 19, t. 3 a, has subsequently been discovered in Kenya Colony and Tanganyika Territory, but I have seen too little material to be able to say whether there is any racial modification. *pulchra.*

11. Genus: **Oneiliana** *Prout.*

Palpus in ♂ (also in ♀ ?) short. Antenna rather short, in the ♂ pectinate. Pectus and femora hairy. Hindtibia with all spurs. Abdomen in ♀ very robust, in both sexes with small crests. Hindwing with distal margin slightly ventricose but not dentate: 2nd subcostal shortly stalked, 1st median slightly or scarcely stalked.

The build and pattern of the only known species suggests that it may have a common origin with *Archichlora*, but it shares more of the characters of the succeeding genera. From *Lophorrhachia* it differs in the presence of all the hindtibial spurs.

O. multifera *Prout* (2 f). Remarkable for its colour, which is "buff-pink" (Ridgway, "Color Standards and Nomenclature", pl. XXVIII) shaded at base and in central area with reddish, and for the numerous lilac-grey patches. Only a pair known, both from Shamva, S. Rhodesia. *multifera.*

12. Genus: **Cheroscelis** *Prout.*

This genus was based (Gen. Ins. 129, p. 137) on the erroneous assumption that the type species would prove to have only 2 spurs on the hintdibia and would be capable of including also *palliata Warr.* und *rubricorpus Warr.* As now restricted, it differs chiefly from *Oneiliana* in having the antenna almost simple in both sexes and the 1st median of both wings stalked, besides the very different coloration and probably the different ♀ palpus, which is here strongly elongate.

C. oospila *Prout* (2 f) with its bright green wings and ample fleshy-ochreous terminal blotches, was named from its resemblance to the South American genus *Oospila*. The type was from the Upper Congo and it has since been received from the Gold Coast. *oospila.*

13. Genus: **Lophorrhachia** *Prout.*

The type species of this genus is remarkable for the fact that the ♂ has 3 spurs on the hindtibia (which is here somewhat swollen at the end, with the single proximal spur rather near to the pair of terminal ones) while the ♀ has 2 only. In *atricristata* and *palliata* both sexes have terminal spurs only. The species show rather strong dimorphism, that of *rubricorpus* being sexual. The crested abdomen, the rather robust build, etc., associate them with one another and with the adjacent genera. The ♀ palpus, as in *Cheroscelis*, has the 3rd joint elongate. The 1st median vein is stalked in the hindwing only, or in *atricristata* not stalked.

A. Hindtibia of ♂ with 3 spurs. Antenna of ♀ simple.

rubricorpus. **L. rubricorpus** *Warr.* (= plagiata *Auriv.*; ♂ = niveicristata *Prout*, ? aenospila *B.-Bak*). Abdomen of ♂ partly green, the crests white; that of the ♀ predominantly red. The ♂ lacks the reddish spot on abdominal margin of hindwing, often also that at tornus of forewing. *rubricorpus* was described from Nigeria, *plagiata* from Kilimandjaro, *niveicristata* from Natal, but the species is now known to inhabit also Sierra Leone, Ivory Coast, Cameroons, Nyasaland, Transvaal and even Madagascar; the latter perhaps a race, with *omorrhodia.* larger, blacker blotches, but only a single ♀ yet known. — **omorrhodia** *subsp. nov.* (2 f) has the white dorsal crests on tergites 2—4 of the abdomen larger than in any other ♀ of *rubricorpus*, a rosy mark at base of costa of forewing just behind the fine white costal line, a very small one at tornus of hindwing; hindwing less angled than in typical *rubricorpus*. São Thomé Island, January & February 1926 (T. A. Barns), 3 ♀♀ in the Joicey collection.

B. Hindtibia of ♂ with 2 spurs. Antenna of ♀ sometimes (*palliata*) pectinate.

atricristata. **L. atricristata** *sp. nov.* Evidently near *rubricorpus* (2 f), notwithstanding the loss of the proximal spur of the hindtibia. Abdomen with the anterior crests black. Hindleg slender throughout. Wing-shape and markings nearly as in well-marked ♂ *rubricorpus*. Nyasaland: Zomba, October 1925, 1 ♂, expanding 37 mm; in the Joicey collection, sent by H. Barlow.

palliata. **L. palliata** *Warr.* (5 a) is a rather large species, recognizable at a glance by the very large, irregularly oval distal patch on the forewing; the markings at base and abdominal margin vary in extent. In *ustipennis.* the name-type all these dark markings are reddish. — ab. **ustipennis** *Warr.* has the markings dark purple-grey. Both forms were described from Southern Nigeria but the species is found from Sierra Leone to the Congo land on Mt. Mlanje, Nyasaland.

14. Genus: **Heterocrita** *Warr.*

Warren founded this genus on a ♂ of *bidentata B.-Bak.*, which he misidentified as "*araria Guen.*" This species has, as Warrens diagnosis indicates, thick and lamellate antenna and 2 spurs only on the hindtibia. The ♀ palpus is extremely long and slender, otherwise the sexes are alike. Both wings have the distal margin excavated between the 1st and the 3rd radial, the forewing scarcely noticeably, the hindwing rather deeply. In the "Genera Insectorum" (fasc. 139, p. 138) I misapplied the name *Heterocrita* to the true *araria Guen.* which differs in the ♂ antenna, the hindtibia, ♀ palpus, etc.; see *Adicocrita*.

bidentata. **H. bidendata** *B.-Bak.* is a small species, recognizable by the shape and structure, the rather large red-brown rings on the 3rd discocellular and the purplish costal margin and distal margins, the latter slightly expanding near the apex and again (triangularly) at the tornus. Sierra Leone to Angola (the type locality), also from Nandi.

15. Genus: **Adicocrita** *gen. nov.*

I propose this name for "*Heterocrita Warr.*". Prout olim, in err. (Gen. Ins. 139, p. 138); see above. The ♀ palpus has the 3rd joint of moderate length. Antenna in ♂ shortly pectinate, in ♀ simple. Hindtibia in both sexes with 1 proximal and 2 terminal spurs. Abdomen with small crests, about as in *Lophorrhachia*, to Sect. A of which, indeed, the present genus shows an evident relationship, though differing in the ♂ hindtibia, the excavated distal margin of the hindwing and the rather wide separation of the 1st median at its origin from the 3rd radial on both wings. Only known from South Africa.

araria. **A. araria** *Guen.*, founded on a damaged ♀ from Namaqualand, is larger than *koranata* (2 g) and appears to differ further in having the abdomen (excepting the green base) predominantly white, only with 2 anterior red, white-centred spots, and the fringes reddish.

koranata. **A. koranata** *Feld.* (2 g) has the abdomen above a good deal clouded with red, the crests red, sometimes in the ♂ bordered on each side with white. Cell-dots red. Postmedian red vein dots (distinct in *araria* type) may be present or obsolete. Terminal line red. Fringe partly white, spotted with red at the veins. ♀ with a red mark at middle of abdominal margin of hindwing. Cape Colony and reaching the Transvaal. Perhaps a form of the following.

discerpta. **A. discerpta** *Walk.* (2 b) differs chiefly in having narrow purple borders above and beneath, but in addition the termen of the hindwing seems less strongly toothed at the 1st and 3rd radials. Cape of Good Hope.

16. Genus: **Centrochria** *Gaede.*

Differs from *Adicocrita* in that the hindtibia has only 2 spurs; from *Heterocrita* in the shape of the wings and especially in the short palpus of the ♀. The venation also shows some differences, but these are perhaps not constant. The distal margin of the hindwing is straight rather than concave between the radials.

C. deprensa *Prout* (5 a) recalls, except in shape und structure, a small *A. discerpta* (2 b) with large cell- dots and more irregular borders. Transvaal. *deprensa.*

C. unipunctata *Gaede* (= metis *Fawcett*) (2 d), the type of the genus, is very near to *deprensa* (2 d), but the cell-dot very small on the forewing, obsolete on the hindwing, the tornal spots larger, the abdomen dorsally red. — The species is only known from Kenya Colony. *unipunctata.*

17. Genus: **Leptocolpia** *Prout.*

This genus is probably near *Bathycolpodes* (infra) but has the forewing narrower, scarcely excavated behind the apex, sharply angled at the 3rd radial, the 1st median of both wings separate from the 3rd radial. Antenna of ♂ pectinate. Forewing predominantly flesh-coloured, only banded with green. Both the species are from Madagascar.

L. viridicatena *Prout.* The hindwing somewhat recalls that of *Bathycolpodes subfuscata* (2 d). The forewing has a blackish cell-spot, an irregular postmedian band of green spots and some irregular green and brown subterminal markings. *viridicatena.*

L. oxygonia *Prout* differs in having the angle at 3rd radial of forewing much produced, the hindwing with abdominal margin much longer and distal margin almost smooth, its green band extremely narrow, while that of the forewing is broader than in *viridicatena* and uninterrupted. *oxygonia.*

18. Genus: **Bathycolpodes** *Prout.*

This genus and those which follow seem to be derived from a form related to *Archichlora*, but with less well developed frenulum. They are generally of smaller size, but of moderately robust build, often with a black face and more or less infuscated underside. *Bathycolpodes* has the palpus minute, the ♂ antenna generally nearly simple, that of the ♀ always simple, both wings with the distal margin excavated between the apex and the 3rd radical. All the species are African.

B. holochroa *Prout.* (3 a) Almost uniformly green above, only the costal area of the hindwing whitish; costal line of forewing and terminal line of both wings brown, spotted with black; fringes paler brown with blackish spots. Underside dark drab with a pale submarginal band and some pale admixture at distal margin. Ja River, South Cameroons. *holochroa.*

B. vegeta *Prout.* Narrower winged than *holochroa* and only expanding 26 mm. Further distinguished by having irregular, dark terminal patches on both wings from the apex to the middle and on the forewing at the hinder angle. Underside greenish, on the forewing suffused with fuscous, both wings with a large dark cell-spot. S. Nigeria: Ilesha. *vegeta.*

B. kabaria *Swinh.* is similar to *vegeta*, but with the excavations in the distal margin less deep, the costal margin more broadly darkened, the terminal spots connected into a complete, though irregular, dark terminal band, containing a pale spot at apex. Underside fleshy brown, the terminal band containing several pale spots. Sierre Leone. *kabaria.*

B. marginata *Warr.* This species and the two which follow agree in having the upperside proximally deep-green and distally red-brown irrorated with black, and differ chiefly in the extent of the two colours. In *marginata* considerably more than half the forewing is green, and about half the hindwing. Underside dull greenish with dark borders. Sierra Leone. *marginata.*

B. semigrisea *Warr.* (2 g) has the green area reduced, in the forewing terminating at apex of cell, thence a little excurved, passing over the base of the 3rd radial and 1st median, then again curving inward, that of the hindwing posterior only, its curved anterior margin scarcely entering the cell. Underside dark, as in *holochroa*, but with the submarginal band narrower and weaker; a conspicuous pale distal spot in middle of forewing. Congo; also Cameroons and Ashanti. *semigrisea.*

B. melanceuthes *Prout* (3 a) has the green still further reduced, measuring only about one-third of the winglength, and the dark parts of the wings quite black. Underside also blacker and with the costal margin of the forewing reddish, whereas in *semigrisea* it is ochreous. Ja River, Cameroons *melanceuthes.*

excavata. **B. excavata** *Warr.* (3 a) One of the smallest species. Both wings with the prominence at the 3rd radial elongate. Forewing rather narrow, the green area much duller than in the previous group, more olive and quite differently disposed, being costal, broadening to the apex. Hindwing with an ill-defined olive-green post-median band and green apex. Nigeria. Also known from Gold Coast and Ivory Coast, Ashanti and the Cameroons.

subfuscata. **B. subfuscata** *Warr.* (2 g) has more the shape of *Heterocrita* and is very distinct in having a white area separating the green ground-colour from the border; the latter less dark and less solid than in the *marginata* group. Range as that of *excavata*. — *subferrata.* **subferrata** *subsp. n.* The green ground-colour and brown borders more deeply coloured. the latter on the hindwing more mixed with grey and with a much redder spot at anal angle; the white area less sinuous, much narrower, only expanding into a band on the anterior half of the hindwing; underside more iron-grey. São Thomé, January-February 1926 (T. A. Barns), 3 ♂♂ in the Joicey collection.

chloronesis. **B. chloronesis** *sp. n.* (3 b) Face black. Antenna of ♂ simple. Shape and coloration nearly as in *subfuscata*, but with only a very fine line separating the green ground-colour from the pale, fleshy-brownish border; border of forewing containing a green central patch, that of hindwing less sinuous-edged than in *subfuscata*. Both wings beneath maize-yellow with interrupted fuscous subterminal band; forewing (except at hindmargin) darkened as far as the postmedian line. Zululand: Eshowe, the type ♂ in my collection. Natal: Impetyeni Forest, a larger ♀ in that of Prof. A. J. T. Janse.

implumis. **B. implumis** *sp. n.* Face black. Forewing with distal margin scarcely sinuate, posteriorly strongly oblique (compare *torniflorata*), deep dull green, slightly less yellowish than in the allies, the border irregular, rather less varied with buff-pink and black than in *subfuscata* and *anisotes*. Hindwing with the excavation moderately deep, the border broadest in its anterior half. Underside paler, the terminal patches at tornus of forewing and anterior half of hindwing infuscated. Escarpment W. of Semliki Valley, 20 miles S. W. of Boga, Belgian Congo, 3500—4000 feet, July 1924 (T. A. Barns). Type in the Joicey collection.

acoelopa. **B. acoelopa** *Prout.* Antenna of ♂ intermediate in structure towards that of the following species, bearing rudimentary pectinations. The excavations in the distal margin are even slighter than in *anisotes*, the hindwing narrower, both wings with the pale border rather broad, its proximal edge less sinuous, the contained dark mark on forewing extended (though narrowly and faintly) almost to the costa. S. Nigeria: Ilesha.

anisotes. **B. anisotes** *Prout.* Antenna of ♂ with short but true pectinations. Face and palpus dull red, not black. The lighter coloration of the wings recalls some South American *Racheolopha* more than the typical *Bathycolpodes*. Underside similar to upper, but paler. Nigeria (type) and Cameroons.

torniflorata. **B. torniflorata** *Prout* (3 a) has the ♂ antenna simple but otherwise seems best associated with *anisotes*. Larger and recognizable at once by the tornal blotch of forewing and the strongly spotted fringes. S. *biflorata.* Cameroons. — ab. **biflorata** *ab. n.* has the blotch of the forewing reproduced in the upperside of the hindwing. Founded on a ♂ from Bitje, Ja River, May 1922, in my collection.

19. Genus: **Chlorodrepana** *Warr.*

Closely allied to *Bathycolpodes*, differing chiefly in shape. Except that the forewing is more or less falcate, the distal margin of both wings is smooth. Antenna of the ♂ simple in all the known species. Confined to Tropical Africa.

aequisecta. **C. aequisecta** *Prout.* (3 a) Differs from *rothi* (3 a) in having the pale costal border mottled with green, the proximal green area of both wings bounded by a straighter line, the pale distal area (which is about 4—5 mm broad) very weakly marked. S. Cameroons.

rothi. **C. rothi** *Warr.* (3 a) is an unmistakable species, the forewing with pale, the hindwing with reddish costal border, both wings with the very broad purple-grey distal border separated from the ground-colour by an irregular whitish line; terminal dots rather large, black. ♀ larger than ♂. Southern-Nigeria and Cameroons.

angustimargo. **C. angustimargo** *Warr.* has the distal borders much less than half as broad as in *rothi*. Sierra Leone.

allevata. **C. allevata** *Prout* has the distal borders again much narrower (5 mm), separated from the fringe by a fine red line; hindwing with the costal margin broadly whitish ochreous. Underside pale green, whereas those of *rothi* and *angustimargo* are predominantly fuscous shaded with pink. Uganda: Entebbe.

cryptochroma. **C. cryptochroma** *Prout* differs from the other species in having the forewing green throughout, the hindwing green with the exception of a broad salmon-coloured costal area; underside ochreous, with a dark terminal and strong blackish irroration, the forewing with a black apical spot. N. Kavirondo. — *sellata* **sellata** *Gaede* (5 a) has a stronger dark dorsal patch in the abdomen and perhaps darker terminal line in the wings above and less powdered hindwing beneath. Cameroons; also in my collection from Gold Coast.

20. Genus: **Hypocoela** *Warr.*

Agrees with the preceding genera in the firm texture of the wings, the short antennae and a few other characters. Palpus shortish or moderate, the 3rd joint in the ♀ elongate. Antenna in both sexes pectinate, the branches moderate or rather short in the ♂, quite short in the ♀. Hindtibia with all spurs. Wing-form characteristic: forewing with costa arched distally, apex more or less falcate; hindwing with costal margin short, abdominal margin long, distal margin smooth, curved. Exclusively African.

H. drepana *Prout*. Distinguishable by the strongly falcate apex, which recalls a Drepanid. The dark basal patch and reddish central band, on a paler reddish ground-colour, also characteristic. Antennal pectinations in ♂ about 3 times as long as diameter of shaft. Central Madagascar. *drepana.*

H. humidaria *Swinh.* A variable species, reddish or greenish, the markings much more confused than in *drepana*, the apex less acutely produced. Upper-and underside with some coarse grey strigulae. Face red; vertex white. The type is reddish, with an ill-defined blackish band. — ab. **viridescens** *nov.* is greenish, with the central band only outlined, the costal area of the hindwing reddish. — ab. **viridicolor** *nov.* is more uniform green except that the strigulated area beyond the middle of forewing is more shot with violet-grey. Madagascar. *humidaria.* *viridescens.* *viridicolor.*

H. subfulva *Warr.* (3 b). Apex only slightly falcate, distal margin of forewing faintly concave between the radial veins. Forewing beneath greenish, mixed with orange-buff, hindwing almost entirely of the latter colour; forewing with a blackish subterminal band in posterior part, sometimes fragmentary. Described from Nigeria, fairly general from Sierra Leone to the Congo. — **uniformis** *Warr.*, from Uganda, is a rather large ♀ form with much stronger submarginal bands. As only the type is yet known, it may prove to be a mere aberration. *subfulva.* *uniformis.*

H. spodozona *Prout* connects *subfulva* with *humidaria*, having more nearly the coloration of the former but lacking — like *humidaria* — the concavity in the termen of forewing. The central band of dark irroration and the white subterminal lunules are distinctive. Underside nearest to that of *subfulva*, the subterminal band replaced by blackish spots. Central Madagascar. *spodozona.*

H. turpisaria *Swinh.* (3 a) ♂ about 27 mm, ♀ larger. Forewing rather broad, with a rather deep excavation behind the apex; dull green, easily fading to yellowish; a dark cell-dot and a curved dark outer line (from the 1st radial to hindmargin near tornus), beyond which is sometimes a solid dark border. Hindwing largely clouded with dark purple-grey, especially anteriorly, and crossed by ill-defined lines of the same colour. Underside much clouded, but with the costal region of the forewing red. Nigeria and Cameroons. — ab. **semirufa** *Druce* has the proximal half of the hindwing above bright orange-red, recalling the following species. *turpisaria.* *semirufa.*

H. zapluta *Prout* differs from *turpisaria* (3 a) in having the greater part of the hindwing, and almost the whole of the underside, bright orange. Hindwing without lines, a greenish border, about 3 mm in width, from the tail to the abdominal margin, extending very narrowly along the latter towards the base. Only known from Uganda. *zapluta.*

20. Genus: **Antharmostes** *Warr.*

Perhaps a group within the genus *Gelasma*, chiefly distinguished by the better developed (though still generally small) abdominal crests and the more ornate distal margin. Exclusively African.

A. Abdominal crests small. ♂ pectinations very short. Hindwing without a tooth at end of 1st radial.

A. simplicimargo *Prout* (3 b) has the simplest pattern, only a costal line and the terminal line of both wings being red. Abdominal crests vestigial, dull reddish. Hindwing with the tail rather shorter than in most of the other species. Upper Congo. *simplicimargo.*

A. interalbicans *Warr.* (3 b) is the commonest species and differs in the sinuous white, slenderly dark-bordered line at distal margin. Underside paler, the middle of the forewing suffused with reddish; terminal line and fringe very dark. Sierra Leone to Congo, the type from the latter country. *interalbicans.*

A. mesoleuca *Warr.* differs from *interalbicans* in lacking the white terminal line but developing, on the other hand, a conspicuous white terminal spot between the 3rd radial and 1st median an both wings. Perhaps, however, a mere aberration. Southern Nigeria. *mesoleuca.*

A. marginata *Warr.* Variable, perhaps a further development of *mesoleuca*, with the midterminal patches much extended. The distal margins, however, make a slight approach to *papilio* in shape. — ab. **semimarginata** *Warr.* has the dark terminal line thickened, the pale spots more or less dusted over with fuscous. — ab. **fuscimargo** *Warr.* has the dark borders still broader, the central pale spots 3 mm in width. — Sierra Leone to the Congo; Uganda. *marginata.* *semimarginata.* *fuscimargo.*

orinophragma. **A. orinophragma** *sp. n.* (3 b). Face and palpus above bright red. Antennal pectinations extremely short. Vertex red; occiput green. Hindtibia somewhat dilated. Wings less dark green than in *marginata*, the borders differently shaped (slightly variable) and edged proximally with white instead of with fuscous. Hindwing with the tail short. Underside very much paler, the borders shadowy. W. Kivu: Upper Lowa River, near Masisi, 5000—6000 feet, February 1924, 3 ♂♂ (T. A. Barns). Type in the Joicey collection.

B. Abdominal crests well developed. ♂ pectinations moderate. Hindwing with a tooth at end of 1st radial.

papilio. **A. papilio** *Prout.* (3 b). A quite unmistakable species, on account of the shape, the very broad borders, the dark red spot on the tail of the hindwing, etc. Described from Magila, but now known from scattered localities from Victoria Nyanza to Barberton, Transvaal.

21. Genus: **Perithalera** *Warr.*

Tongue slight. Palpus in ♂ rather short, with 3rd joint small, in ♀ greatly elongate, with 3rd joint extremely long. Antenna pectinate in the ♂, dentate in the ♀. Hindtibia with 4 spurs, in the ♂ with a strong hair-pencil. Both wings with the distal margin ventricose, the venation without outstanding peculiarities. Only two species are yet known.

oblongata. **P. oblongata** *Warr.* (3 c) Green, with white costal edge, dark-red cell-spots (that of the hindwing elongate) and terminal line, and white fringes spotted with red. Underside whitish, without markings. Nigeria, also from Sierra Leone and Ivory Coast.

oblongula. **P. oblongula** *Prout* has the white costal edge much narrower than that of *oblongata*, the cell-dots minute, the terminal line slightly crenulate, the hindwing slightly angled at the 3rd radial, otherwise less strongly gibbous. Abdomen slenderer than that of *oblongata*. N. Madagascar.

22. Genus: **Epigelasma** *gen. nov.*

Palpus in both sexes short and rather slender. Antenna in ♂ moderately pectinate, in ♀ shortly pectinate or serrate. Hindtibia of ♂ not dilated, proximal spurs at about $^3/_4$ tibia. Abdomen not crested. Frenulum in the ♂ stronger than in most of the surrounding genera, in the ♀ also retained, though weak. Scaling and venation nearly as in *Gelasma*, 1st subcostal of forewings arising from the cell, 1st median occasionally stalked, costal of hindwing anastomosing shortly with subcostal. The hindwing is not or scarcely angled at the 3rd radial. — Type of the genus: *Epigelasma meloui sp. nov.* — Distinct from *Gelasma* in the short ♀ palpus, better developed frenulum and typically in the pectinate ♀ antenna. Apparently confined to Madagascar.

A. Section. Antenna of ♀ with pectinations, about as long as diameter of shaft.

meloui. **E. meloui** *sp. n.* (3 c). Expanse 36—42 mm, the only known ♀ 43 mm. White, slightly irrorated with green, especially in the anterior part of forewing, and with 4 green bands, the 2 subterminal ones very thin. Hindwing also with abdominal margin green, the bands converging posteriorly. Small green cell-dots and a fine green terminal line. Face red above, white below; palpus reddish. Described from a good series from Diego Suarez in Mus. Tring, collected by G. Melou. Differs from the other species of similar coloration in the structure and in the rounded hindwing.

B. Section. Antenna of ♀ serrate.

triplicifascia. **E. triplicifascia** *Prout* (3 d) is much smaller, the bands slenderer, less sharply defined, the cell-dots black. Differs also in shape, especially that of the hindwing, which has a slight angle at the 3rd radial. Central Madagascar.

23. Genus: **Gelasma** *Warr.*

This genus, sens. strict., does not belong to the Acthiopian Region. A short account of it is given in Vol. 4, p. 22, and it will be further discussed in Vol. 12. The two Madagascar species which are provisionally referred to it are aberrant in having the 1st subcostal of the forewing well stalked with the others and anastomosing with the costal; 1st median of hindwing not always stalked with 3rd radial.

cowani. **G. cowani** *Btlr.* Face white. Palpus with 1st and 2nd joints crimson on outerside. Forewing with costa rather strongly curved. Both wings with nearly the markings of *Perithalera oblongula*, but the costal edge of the forewing is reddish black and there are dark postmedian dots on the veins. Tail of hindwing rather sharp. Madagascar.

fuscipuncta. **G. fuscipuncta** *Warr.* differs from *cowani* in having the apex of the forewing and the tail of the hindwing less acute, the minute cell-dots black, postmedian dots blackish, terminal line wanting, fringes plain greenish. Madagascar: Morondava. Only the type known.

24. Genus: **Thalassodes** *Guen.*

A very homogeneous group of Indo-Australian and African *Hemitheinae* with most of the characters of *Gelasma*, but the discocellulars of the hindwing extremely oblique, so that the cell is at least 1½ times as long posteriorly as anteriorly. The wings are generally more or less strigulated with white, as in typical *Prasinocyma*. The African species have the venation of the forewing usually more specialised than the Indo-Australian, the 1st subcostal arising from the end of the cell or from the stalk of the other subcostals.

T. unicolor *Warr.* is only definitely known in a series of not very perfect ♀♀ from Southern Nigeria, hence it is difficult to say whether it may not prove to be a form of *digressa* or whether my *dentatilinea* may be a form of it. Size as in the larger ♀-forms of *digressa*, palpus perhaps very slightly longer; distinguished by the obsolescence of the white lines and, on the hindwing, of the white cell-mark. Fringes apparently white proximally, not yellow. Aurivillius has recently recorded from Fernando Po a *Thalassodes* which he believes to the referable here and Mr. T. A. Barns has taken a similar one on Sao Thomé. *unicolor.*

T. dentatilinea *Prout* (3 e) is perhaps merely a form of the following, with strongly expressed, strongly dentate bluish-white lines, but as the wings are not quite so robust and the hindwing appears somewhat more sharply angled in the middle I am not yet prepared to sink it. Known from Sierra Leone to Nigeria, the type being from the latter country. *dentatilinea.*

T. opaca *Warr.* is a small species (26—29 mm), of a rather opaque blue-green colour, with the costal edge and the fringes yellow. Hindwing quite weakly angled at the 3rd radial. Lines bluewhitish, as in *dentatilinea*, but more slender and indistinct, sometimes almost obsolete. Apart from the type ♀ and 3 other examples from Warri, S. Nigeria, I only know a ♀ from Bingerville, Ivory Coast. *opaca.*

T. digressa *Walk.* (= ricinaria *Guen.*, chlorinaria *Mab.* aequaria *Mab.*, subreticulata *Mab.*, sapoliaria *Swinh.*) (2 h). By far the commonest African species of *Thalassodes*. Very variable in size. Distinguished from all the preceding by the straight white postmedian line of the forewing. Palpus scarcely so long. Angle of hindwing moderate. Face red, as in all the Continental African *Thalassodes* yet known. Occurs almost through out Tropical Africa and southwards to Durban, also on the Comoro Islands, Madagascar, Reunion and Mauritius. It has been bred from Ricinus. Larva very slender, green, with sharply bifid head and bright red dorsal line. Pupa slender, greenish (Guenée). *digressa.*

T. progressa *Prout* (3 c). Much like a darker, duller, blue-green *digressa* with the lines nearly obsolete, but distinct from all the African *Thalassodes* in having a hair-pencil on the ♂ hindtibia. Palpus longer than in *digressa*. North Madagascar. A single ♂ from Uganda, with similar structure, probably represents a race. *progressa.*

T. hyraria *Guen.*, founded on a single, somewhat mutilated ♀ from Reunion, differs from all the preceding in its bright green face. Palpus long. Wings blue-green, rather strongly strigulated with white, the lines on the forewing almost entirely obsolete, the postmedian of the hindwing well traceable. Hindwing with the angle at the 3rd radial blunt. *hyraria.*

T. (?) **ostracites** *Karsch* is only known in the ♀, and I suspect that the discovery of the ♂ will show it to be congeneric with *Hemistola albisticta Warr.* which it closely resembles in colour and markings. The face, however, is red, not green and the terminal joint of the palpus is strongly elongate; moreover the hindwing is rather more acutely angled and has the discocellular almost or quite as oblique as in *Thalassodes*. Madagascar, only two specimens known to me. A race (?), also only known in two ♀♀, occurs at Nairobi. *ostracites.*

25. Genus: **Prasinocyma** *Warr.*

The typical group of this very extensive genus belongs to Africa and is here very rich in closely allied species. Probably many are still confused in collections, while on the other hand it is not unlikely that some of the supposed differential characters of species — presence or absence of a cell-dot or on the forewing of a hindmarginal white spot — are in some cases varietal only. To facilitate sorting them by these characters. we have arranged the more difficult species in corresponding order:

Wings without hindmarginal spot or black cell-dots*): *tranquilla* to *panchlora*.

Wings with hindmarginal spot but without black cell-dots: *chloroprosopa* to *albinotata*.

Wings with black cell-dot but without hindmarginal spot: *rugistrigula* to *dohertyi*.

Wings with hindmarginal spot: (unless in *cellularia*) and black cell-dots: *nigrimacula* to *gajdacsi*.

The genus may be regarded as the centre of the group in which the frenulum is present in the ♂ but obsolete in the ♀ and contains all the species which present no outstanding peculiarity of shape or structure.

*) Only in *vermicularia* with minute black cell dots at times present.

Palpus with the 3rd joint more or less elongate in the ♀. Hindwing rounded or bent at the 3rd radial. Venation normal.

candida. **P. candida** *Prout* (3 c) is an unmistakable species, the face being black, the wings white, entirely without markings. Hindwing rounded. Antennal pectinations short. Expanse 30 mm. Diego Suarez, Madagascar, only known from 4 ♂♂.

tranquilla. **P. tranquilla** *Prout* (3 c) is a small species, rather bright green, without strigulation, the rounded hindwings recalling a *Syndromodes*; fringes green, tipped with white. Abyssinia, in the neighbourhood of Harar.

pallidulata. **P. pallidulata** *Mab.* appears likely, according to the description, to belong to this genus. 23—24 mm. Wings pale blue-green, slenderly and very densely vermiculated with white; a common median fascia of a more intense and less strigulated green. Fringe similar. Wings beneath white, glossy, costa somewhat yellowish. Face red, antennae red. Near *vermicularia Guen* (2 h). Madagascar.

degenerata. **P. degenerata** *Prout.* Smaller than *tranquilla* and differing structurally in that the hindtibia of the ♂ has a hair-pencil and the tarsus is only one-half as long as the tibia. Face reddish brown. Pectinations rather long. Wings opaque green, not strigulated; cell-dots indistinct, dark-green. Hindwing rounded. Fringes as in *tranquilla* (3 c). S. E. Ruwenzori.

inversicaulis. **P. inversicaulis** *Prout.* Group of *scissaria* (2 h). Face brighter red. Hindtibia without hair-pencil. Terminal joint of palpus in ♂ shorter. Wings slightly narrower; colour slightly darker, the white strigulation equally strong. I have only seen the type, from Pinetown, Natal; in this, the stalking of the 3rd radial of the hindwing is longer than that of the 1st radial.

simiaria. **P. simiaria** *Guen.* (= tenuis ♂ *Warr.*, ex err.) (3 c). Rather smaller and less strongly striated with white than *vermicularia* (2 h), the face dull reddish. Probably nearer to *scissaria Feld* (2 h)., from South Africa, but of a less bright, more bluish green, the hindwing more or less angled at the 3rd radial, the ♂ hindtibia with a longer terminal process. Described from Senegal, since received from Sierra Leone and Ivory Coast. Warren's *tenuis* (Novit. Zool. 5. p. 16) was founded on a mixture, but his type proves to be the ♀ (see *Androzeugma*), while his ♂ appears to be a small, narrow-winged *simiaria* in poor condition. In that case Warri, S. Nigeria, *angolica.* is to be added to its range. — **angolica** *subsp. n.* is rather larger (the ♂♂ 26—29 mm), the wings a little lighter colour and perhaps more delicate in texture, more rounded. Possibly a separate species, as the terminal joint of the ♂ palpus looks still shorter. Founded on 5 ♂♂ from Bihé, Angola, in the Tring Museum. Apparently similar forms occur in Uganda and Kenya Colony, but I have before me only a few poor specimens.

ampla. **P. ampla** *Warr.* is possibly only a giant ♀-form (39 mm) of the preceding, in which case the name *angolica* will fall. Hindwing rounded, as in *scissaria* (2 h). Colour much paler, the white striation being greatly increased. Palpus relatively longer than in *simiaria* ♀. Face brighter red. Bihé, Angola, only the type known.

xanthopera. **P. xanthopera** *Bastelb.* founded on a single ♀ from Banana, Congo, is distinguished from the two following by its bright gold-yellow fringes and white face. Costal edge of forewing narrowly sulphur yellow.

scissaria. **P. scissaria** *Feld.* (2 h). Hindtibia of ♂ with a hair-pencil but not — as in *simiaria* — with a long terminal process. Palpus of ♀ with 3rd joint less long than in that species and *vermicularia*. Face reddish brown. Hindwing scarcely at all bent at the 3rd radial. Colour bright green; the copious, though small, white strigulae suffice to distinguish it from *tranquilla* and *degenerata*. Fairly common in Natal and Cape Colony and reaching the Transvaal and perhaps East Africa; type a ♀ from Grahamstown.

vermicularia. **P. vermicularia** *Guen.* (2 h) differs from the allies in having the face green, with a narrow red band above. Palpus of the ♀ with 3rd joint very long. Hindtibia of ♂ with hair-pencil and moderate terminal process. Wings rather thinly scaled; cell-dots indicated in darker green, sometimes with a few black scales. Found *neavei.* sparingly in South Africa and to Nyasa and perhaps Kenya Colony. — **neavei** *Prout*, founded on a single ♀, is probably a very large ab. of *vermicularia* with the cell-dots black, that of forewing minute, that of hindwing also very small and slender, but slightly prolonged along the radial fold. Mount Mlanje.

tandi. **P. tandi** *B.-Bak.* differs from *vermicularia* in its duller face, without red band, in having the white strigulae shorter, stronger, showing a tendency to form dots or spots, and in having the fringes spotted with white at the veins. Angola. Also known from Kikuyu and Tanganyika.

pictifimbria. **P. pictifimbria** *Warr.* (3 d) Rather bright green, the strigulation fairly strong. Hindtibia of ♂ not dilated. Palpus of ♀ about as in the two preceding species. Face brownish. Hindwing with termen slightly bent at 3rd radial. Fringes very characteristic, yellowish, with bright rose-coloured, partly white-margined spots at the ends of the veins. Described from Angola but very widely distributed, though always rare.

panchlora. **P. panchlora** *Prout* (3 d). Face green, vertex more broadly white than in *vermicularia*. The wings lack the white strigulation of the allies and the costal edge of the forewing is of a more whitish yellow. Hindtibia

of ♂ with a slender hair-peneil and rudimentary terminal proeess. Deseribed from Cape Colony, known also from Orange Free Staate.

P. chloroprosopa *Prout* is very near *panchlora* (3 d) but of a rather deeper green, the costal edge narrowly ochreous at base, becoming more red-brownish. ♂ unknown, ♀ palpus wiht 3rd joint long, as in *vermicularia* and *panchlora*. Distinguished espeeially by having a white spot at the middle of the hindmargin of the forewing. Hindwing with distal margin very slightly bent. Johannesburg, also Orange Free State and the Cape. *chloroprosopa.*

P. unipuncta *Warr.* closely resembles a small *scissaria* (2 h) but has the face rather more reddish and is eharacterized by a white spot at the middle of the hindmargin of forewing which — unlike that of *chloroprosopa* — is bounded distally by some brown and black scales. Only the type is yet known from Durban and this has unfortunately lost the hindlegs; but a rather larger form which seems to agree is not rare in Kenya and Tanganyika Territory and has a hindtibial peneil and short terminal proeess. *unipuncta.*

P. gemmatimargo *Prout* (3 d). A rather small species, with reddish face. Palpus in the ♂ rather short, in the ♀ fully twice as long as diameter of eye, with long terminal joint. Hindwing scarcely angled at 3rd radial. Colour somewhat bluish green, thinly sealed, with rather strong white dots and short strigulae; characteristic is a row of white dots on the ends of the veins; forewing with a white spot on hindmargin. Described from the Cameroons, but reaches Sierra Leone. A few specimens which I have seen from Uganda have the terminal dots small, perhaps a separate race. *gemmatimargo.*

P. oblita *sp. n.* (3 e) occurs together with the preeeding, of which I should have supposed it a form but that the ♀ palpus appears still longer, its terminal joint almost as long as diameter of eye. On an average rather larger (31—34 mm), the white strigulation scarcely so strong, terminal dots wanting. Founded on 1 ♂ and 4 ♀♀ from Bingerville, Ivory Coast, in Mus. Tring; also known from the Cameroons, Congo, Uganda and Abyssinia. *oblita.*

P. niphosporas *sp. n.* (3 f). ♂, 42 mm. Face pale green. Palpus little longer than diameter of eye. Antennal peetinations moderate, ceasing little beyond middle of shaft. Hindtibia not dilated, the spurs approximated. Distinguishable from the following speeies by the hindtibia, the shorter palpus and the neater white maculation of the wings. Minute cell-dots present. Fringes pure white in middle, green proximally, grey distally. N. W. Kivu: Higher Oso Valley, 5000 feet, September 1921 (T. A. Barns), type in coll. Joicey. 2 ♂♂ from lava plains beneath Birunga Volcanoes, 5000 feet, March 1924 (Mrs. Barns) in the same collection. *niphosporas.*

P. albinotata *Prout* (3 d), originally described as an aberration or race of *rugistrigula*, seems to be a good species, the cell-dots obsolete or nearly so, a white spot present on hindmargin of forewing. Hindtibia of ♂ dilated, with hair-pencil and rudimentary terminal proeess. Gold Coast (the type), Cameroons and Congo. *albinotata.*

P. rugistrigula *Prout.* 40 mm. Face dull reddish, mixed with green. Hindwing shaped about as in the two preeeding speeies. Smooth dull green (perhaps between "tea-green" and "sea-green" of Ridgway) with the whitish strigulae coarse, irregular. Cell-marks black-brown, longitudinally placed on the radial fold, that of the hindwing with a dark green mark in front of it. Forewing without white posterior spot. Hindleg formed as in *albinotata*. Gold Coast. *rugistrigula.*

P. germinaria *Guen.* (3 d) is variable in size and in its shade of green, or perhaps includes a mixture of closely allied speeies. Generally moderately large and rather bright green, not very strongly strigulated; Gueneé's type was "35 mm, d'un vert de montagne". The face is red and the only markings are the small but sharply black cell-dots. Palpus moderate. Described from Abyssinia but widely distributed, Nigeria, Uganda, E. and S. Africa. *germinaria.*

P. dorsipunctata *Warr.* I have not seen Warren's type, from Pinetown, Natal, but have little doubt as to the determination of some faded ♂♂ from the same district. 31—34 mm. "Face olivegreen, possibly faded", a white dot on each of the three middle segments [tergites]; wings semihyaline grey-green, with dense pale strigulations; cell-spots red-brown, on hindwing triangular, large; fringe green. I call the cell-spots blackish, that of the hindwing somewhat rounded proximally, pointed distally. Hindwing scarcely bent at 3rd radial. Perhaps an ab. of *germinaria*, with the cell-spot of the hindwing enlarged, but the colour of the face renders it doubtful. *dorsipunctata.*

P. idiotica *sp. n.* ♂, 34 mm. Face green (mostly discoloured). Length of palpus fully 1½ times diameter of eye, 3rd joint rather elongate, about ½ of 2nd joint. Pectinations not very long (the longest about 4 times width of shaft), ceasing about the 29th joint. Hindtibia with rather strong pencil and very short terminal proeess. Wings rather thinly scaled, dark bluish glaucous, with cell-dots rather less large than in *dorsipunctata*. Very similar to that species, the palpus apparently longer, the distal margin of hindwing slightly more bent. N. W. Kivu: Upper Oso River, 4000 feet, February 1924 (T. A. Barns). Type in coll. Joicey. *idiotica.*

P. transita *sp. n.* ♂, 33 mm. Face reddish brown. Length of palpus 1¼ times diameter of eye. Antennal peetinations rather obliquely placed; not very stout, the outer series about 5 times the length of diameter of *transita.*

shaft. Hindtibia with hair-pencil and short process, the spurs rather approximated. Forewing with rather copious, fairly regular, short white strigulae; apparently transitional towards *rhodocycla* (3 a); hindwing more rounded; cell-dots smaller and browner; no white spot at hindmargin of forewing. Palpus, pectinations (continuing well beyond the 30th joint), wing-shape and brighter green colouring distinguish it from *idiotica*. W. Kivu: S. side of Middle Lowa Valley, S. of Walikali, 3500 feet, forest land, March 1924 (T. A. Barns), only the type known, coll. Joicey.

geminata. **P. geminata** *Prout* (3 d). Broad-winged, rather bright green, costal edge of forewing pink. Face green, only with a red line at upper edge. Hindtibia of ♂ with hair-pencil. Hindwing appreciably, though weakly, angled; a quite distinctive p a i r of black cell-dots; both wings with minute dark terminal dots. Kenya Colony.

batesi. **P. batesi** *sp. n.* ♂, 33 mm. Face bright green. Palpus red, with terminal joint short. Hindtibia scarcely dilated. Wings shaped and coloured nearly as in *geminata*, the hindwing a little more angled, the colour perhaps a little lighter, with costa scarcely so rosy; cell-mark of hindwing single, though somewhat elongate. Fringes as in *trifilifimbria*. Cameroons: Fumban, 4000 feet, September 1922 (G. L. Bates). Type in coll. L. B. Prout.

pulchraria. **P. pulchraria** *Swinh.* (3 c) is another bright-green species with pink costal edge, but has the face red and the hindwing rounded. Hindtibia not dilated. Cell-dots small. Not rare in Kenya Colony. Also known from Nyasa and the Transvaal.

sanguinicosta. **P. sanguinicosta** *Prout*. 27 mm. Differs from all the other species in having the costal edge of the forewing broadly bright-red. Hindtibia with hair-pencil. Wings shaped, coloured and strigulated nearly as in the *scissaria* group, hindwing rounded, minute cell-dots present. Khartum, only the type known.

dohertyi. **P. dohertyi** *Warr.* (3 e). Larger and perhaps still broader than *geminata*, antenna more pink, structure more nearly as in *pulchraria*; the pink costal edge mixed with blackish; cell-dots large, brownish; terminal dots strong. Kikuyu Escarpment (loc. typ.), Ruwenzori and Ruanda.

nigrimacula. **P. nigrimacula** *Prout*. As broad-winged as *geminata*, hindwing similarly shaped. Costal edge buff, not pink. Cell-dots single, fairly large, terminal black dots small. Characterized by an additional, large black dot at hindmargin of forewing just beyond the middle. The hindlegs are lost in both the known ♂♂. Uganda (type) and Nairobi; (?) Angola (a damaged ♀ with unusually short terminal joint of palpus).

neglecta. **P. neglecta** *Prout* (3 e). Brighter green than most of the similar species. Face reddish, slightly sprinkled with green; a narrow white band below. Palpus in ♀ as in *gemmatimargo*. Hindtibia of ♂ with white hair-pencils and very short terminal process. In some aberrations the composite hindmarginal spot of the forewing is reduced. Described from Urindi district, Tanganyika, but is very widely distributed from Nigeria and Angola to the Great Lakes and into Nyasaland.

congrua. **P. congrua** *Walk.* (2 h), founded on a faded ♂ from "Congo", was treated by Swinhoe as identical with the following species, but seems to have the 3rd joint of the palpus definitely shorter (⅓ of 2nd joint), terminal process of hindtibia also shorter, unless damaged (appears only ⅓ length of 1st tarsal joint). I believe I have matched it from Kumasi, S. Cameroons and Bopoto (Upper Congo), but the group is exceedingly difficult and stands in need of more exhaustive study.

nigripunctata. **P. nigripunctata** *Warr.* (3 e). Blue-green, duller than *neglecta*, the white strigulae short, in part punctiform, not very strong. Face red-brown. Palpus in ♂ with 3rd joint ½ length of 2nd, in ♀ very long. Hindtibia of ♂ with hair-pencil and a moderate terminal process, fully half the length of 1st tarsal joint; tarsus shorter than in *neglecta*. Cameroons; apparently distributed as far as Sierra Leone and perhaps Unyoro. —
nandiensis. **nandiensis** *form. n.* (? *subsp.*). seems to be a larger race of *nigripunctata* (♂♂ 33—40 mm, against 30—35 mm for the West African race) from Rau, Nandi Country, 9 ♂♂ in Mus. Tring (Ansorge).

delicataria. **P. delicataria** *Möschl.*, founded an a faded ♂ from Aburi, Gold Coast, is similar to the two preceding, but the face seems to be green and the palpus perhaps still shorter than in *congrua*. Hindtibial process nearly as long as in *nigripunctata*. Hindwing slightly narrower and more angled, recalling *Thalassodes*. Cell-dots very small; minute terminal dots (scarcely visible) at the ends of the veins.

niphobota. **P. niphobola** *sp. n.* ♂, 43 mm. Face green. Palpus 1⅓. Antennal pectinations rather stout, about 3 times as long as diameter of shaft. Abdominal tergites each with a white anterior spot. Hindtibia with hair-pencil, but without process. Wings with the white irroration more punctiform than strigulate, some dots in, behind and just beyond the cell somewhat enlarged; minute dark cell-dots and terminal dots; forewing with a large white spot at hindmargin beyond middle marked exteriorly with grey-brown; fringes green, with white spots at the veins. Hindwing fairly broad, with well-marked, though not acute, angle at 3rd radial. W. Kivu: Upper Lowa Valley, near Masisi, 5000—6000 feet, February 1924 (T. A. Barns), the unique type in the Joicey collection. Differs from *rugistrigula* in the larger white spots, the spotted fringes, etc.

jefferyi. **P. jefferyi** *sp. n.* ♂, 36 mm. Face bright green, whitish below, a red line above. Length of palpus not quite 1½ diameter of eye, with terminal joint rather short; reddish brown, beneath white. Antennal pectinations

rather long and slender. Hindleg and abdominal spots as in *niphobola*. Forewing with apex rather acute; bright green, as in *geminata* (3 d), the white strigulae short but numerous, the costal edge buff, tinged with pink; cell-dot minute; hindmarginal spot moderate, white proximally, red and blackish mixed distally; fringe proximally green with white spots, distally whitish. Hindwing moderately angled; cell-dot and fringe as on forewing. Kenya Colony: Lumbwa, October 1923 (G. W. Jeffery), type in coll. Brit. Mus. A very worn ♂ from Lualaba Valley, Belgian Congo, in the Tring Museum seems identical. A ♂ from Blantyre in Mus. Brit. may represent a race, with smaller abdominal and hindmarginal spots (fringes lost).

P. trifilifimbria *Prout* (3 f). Face dull red, narrowly white below. Structure about as in *congrua*; 3rd joint of palpus in ♀ rather short. Fringes tricoloured, proximally green, centrally white, distally reddish grey. Cameroons and probably Southern Nigeria. — **leucopis** *Prout* differs in its pale-green face (fading to whitish), only narrowly red above, and in the widening of the white central band of the fringe. Nyasa, in coll. Joicey. *trifilifimbria.* *leucopis.*

P. centralis *Prout* (3 f). Closely like the most brightly coloured specimens of *trifilifimbria*, perhaps a form of it, unless the palpus is slightly shorter still. Cell-dots and hindmarginal spot larger, the former narrowly ringed with whitish; fringes without the central white line. Uganda, the type from Mount Ruwenzori; also N. W. Kivu and a smaller form (race?) from Cameroons and S. Nigeria. *centralis.*

P. pupillata *Warr.* (3 f) is larger, with the apex more acute, the hindmarginal spot of forewing smaller than in *centralis*. Palpus similar. Face green. Kikuyu Escarpment. *pupillata.*

P. rhodocycla *Prout* (5 a). Palpus much longer, in the ♀ somewhat over twice as long as diameter of eye. Face reddish, but in part mixed with green. Wings more rounded, cell-spots more red, the white hindmarginal spot of forewing very slight. Described from Ivory Coast, but proves to be widely distributed (Senegal, Gold Coast, Upper Congo, Kenya Colony). Possibly a form of the following, as the colour of the face seems rather variable in this group. *rhodocycla.*

P. oculata *Prout* combines the green face of *pupillata* with the long palpus of *rhodocycla*. Wings rather less broad and less rounded than in the latter, the white hindmarginal spot of the forewing extremely small. Daro Forest, Toro, Uganda, only the type yet definitely known. A broad-winged ♀ from Kumasi seems to agree. A ♂ from N. Kavirondo has the cell-dots smaller, the white hindmarginal spot wanting. *oculata.*

P. cellularia *Guen.* is unknown, to me, but probably very near *oculata* but faded. 35 mm. Greyish water-green, white strigulae well visible, hindwing in part suffused with this white, leaving the veins green, and with a black cell-spot, surrounded by testaceous; a similar, but much feebler spot discernible on forewing. Face white. Reunion. *cellularia.*

P. stictimargo *Warr.* Not quite so large as *pupillata*. Differs further in its duller colour (bluish grey green), small and not white-ringed cell-dots, enlarged hindmarginal spot and especially in the black dots at vein-ends, bordered by larger white dots on the fringe. Kikuyu Escarpment. *stictimargo.*

P. stictoloma *Prout.* Smaller than *stictimargo* (31—33 mm), 3rd joint of ♂ palpus slightly shorter still, face dull reddish, apparently less mixed with dark scales, wings rather less irrorated and striated with white, forewing with dark terminal dots smaller, hindwing rather narrower, rather sharply angled at 3rd radial. Hindtibia of ♂ dilated, with very short terminal process. Uganda. *stictoloma.*

P. gajdacsi *sp. n.* (3 f) ♀, 35—40 mm. Face green, discolouring to buff. Palpus about 1½, 3rd joint relatively short. Forewing at least as broad as in *pupillata*, with similar apex; rather bright green, with the white irroration and strigulation slight; cell-dot minute, black; the spot on hindmargin pale cream-buff, well developed; large dots of the same colour at the ends of the veins, finely edged with black-brown distally; fringe green. Hindwing ample, with termen wavy, bluntly angled at 3rd radial; cell-dot and termen as on forewing. Abyssinia: Adis Abeba, July 1926, the type, and June 1926, 2 smaller ♀♀ (Gajdacs), Mus. Tring. *gajdaesi.*

P. rubrimacula *Warr.* (3 e) differs from all the other species in the large, predominantly rose-coloured hindmarginal spot of the forewing. Unyoro (type) and reaching Kivu and Nairobi. *rubrimaeula.*

P. differens *Warr.* Unlike any preceding African *Prasinocyma*, more recalling some Papuan species. Palpus short. Hindtibia not dilated. Expanse 30 mm. Opaque bright green, without white strigulation: forewing with a large, hindwing with a small cell-dot; both wings with small white dots at vein-ends; fringes predominantly rosy-purplish, proximally darker-spotted opposite the veins and with slender green streaks between the veins. Hindwing with termen very slightly bent in the middle. Underside with rosy suffusion proximally, costally more blackened. Kikuyu Escarkment, only the type known. *differens.*

P. salutaria *Swinh.* (= differens ♀ *Warr.*, ex err.) (3 f) resembles *differens* in the fringes, though these are paler, but is a more typical *Prasinocyma* in its texture. Palpus in both sexes long and slender. Hindtibia *salutaria.*

of ♂ with hair pencil. Forewing with a very small white spot on hindmargin before middle, often also traces of the other 2 white spots of *hadrata* (2 h), cell-dots of the two wings equal in size. Sierra Leone to Kikuyu Escarpment, the last-named being the type locality.

triglena. **P. triglena** *sp. n.* (3 g) ♀, 30 mm. Similar to *salutaria*, palpus perhaps still longer, almost 3 times as long as diameter of eye. Less yellowish and more opaque green, with similar or rather smaller black cell-dots; an oblique row of 3 small white, distally dark-scaled spots proximally on forewing, the first in middle of cell, the second, slightly more distal, midway between the median and submedian veins, the third and most distal at hindmargin, corresponding to those of *salutaria*, the hindmost less distally placed than in *hadrata*; terminal white dots present, but no rosy markings on fringe; hindwing slightly less angled than in *salutaria*. Forewing beneath with faint fleshy-grey suffusion, except at margin. Antennal shaft white to beyond middle. Usambara, ca. 1600 m. (Weiss jun.), type in Zool. Mus. Berlin.

hadrata. **P. hadrata** *Feld.* (2 h) is bluer green than *triglena*, forewing less broad, hindwing tailed, cell-dots obsolete, fringe spotted with dark red-brown opposite the veins, etc. Palpus moderately long. Knysna, only the type ♂ known.

albisticta. **P. albisticta** *Warr.* (3 g). Palpus in the ♂ about as in *hadrata*, in the ♀ strongly elongate. Colour and shape intermediate towards *triglena*. Abdomen with a dorsal stripe of reddish and blackish, containing white spots. Cell-dots minute or obsolete. Hindmarginal spot almost central, very small, but with some dark scales distally. The white terminal spots bounded proximally by a very fine, sinuous dark line. Fringe pale, yellowish and whitish, dark spotted. Nandi Country (type) and distributed from Ivory Coast to S. Rhodesia.

bifimbriata. **P. bifimbriata** *Prout* is perhaps related to *albisticta*. On an average smaller, palpus less long, abdomen not ornamented, hindtibia without hairpencil. Slightly more yellowish green, unmarked except for minute black cell-dots. Fringes characteristic, unspotted, proximally buff-yellow, distally grey. Described from the Transvaal, but subsequently seen from isolated localities from Abyssinia to Natal.

niveisticta. **P. niveisticta** *Prout* (3 g). Termen and fringe as in *salutaria*, also the ♀ palpus; that of the ♂ much less long. Ground-colour more nearly as in *triglena*, but a little more bluish. Distinctive is the white, dark-
adornata. edged spot at anal angle of both wings, enclosing some rosy scaling. Natal. — **adornata** *Prout*, from Ashanti (loc. typ.) and Ivory Coast, has the spots at anal angle enlarged and develops a still larger one, similarly coloured, at apex of hindwing, reaching the 1st radial.

tetracosmia. **P. tetracosmia** *sp. n.* ♂, 29 mm. Evidently near *adornata*, the hindwing rather broader and less angled. Face green. Length of palpus 1⅓ diameter of eye, 3rd joint well over ½ of 2nd joint. Pectinations 4 times as long as diameter of shaft, continuing about to joint 30. Abdomen above green at base, then fleshy, mixed with white and blackish. Hindtibia not dilated. Wings thinly scaled, dark yellowish green; costal edge of forewing buff, dark-spotted; hindwing with whitish cell-dot; apical and tornal blotches developed on both wings, on forewing rather more extended longitudinally than transversely, respectively touching 1st radial and just crossing 2nd median, the apical of the hindwing almost reaching 3rd radial; terminal spots whitish buff; fringes variegated. Kivu: Rugege Forest, Ruanda district, 7000 feet, December 1921 (T. A. Barns), the unique type in the Joicey collection.

megacydes. **P. megacydes** *sp. n.* ♂, 40 mm. Face white, mixed with green. Palpus 1¼ diameter of eye, terminal joint rather short; dull red, beneath white. Antenna pectinate to about the 32nd joint. Abdomen with some white dorsal spots. Hindtibia with hair-pencil; terminal process very short. Wings deep dull yellow-green, rather thinly scaled; markings irregular, white, delicately tinged with pink; a broad band close to base, on forewing not crossing subcostal; a reniform cell-spot, on hindwing joined to a white costal area and followed by some white maculation between the radials; a large patch from end of hindmargin, tapering to a point anteriorly, this point placed behind 1st median on hindwing, at 3rd radial on forewing, on the latter touching a subterminal spot between the radials; small terminal spots, enclosing blackish dots at the veins. Hindwing with termen crenulate. Kivu: Virunga Mountains, 9000 feet, October 1921 (T. A. Barns). Type in coll. Joicey. A beautiful species, recalling an *Anisozyga*.

perpulverata. **P. perpulverata** *Prout* (3 h). Wings relatively a little narrower than in typical *Prasinocyma*, hindwing with distal margin rounded. Palpus in both sexes with terminal joint short. The difference in colour, which gives to this species such an abnormal aspect, is merely due to its desert environment (see p. 1). Hindtibia not
subfasciata. dilated. Somaliland (loc. typ.) and Abyssinia. — ab. **subfasciata** *Prout* has on the forewing indications of a dark basal patch, dark central band and terminal dashes between the veins. Somaliland, with the type. —
perscripta. ab. (? sp. div.) **perscripta** *Prout* is small (16 mm) and with still more markings, the median area broadly dark-mixed in anterior half, a dark costal subterminal patch (as in *loveridgei*), the hindwing somewhat shortened. Founded on 1 ♂ from Mandera, Somaliland. I now suspect it will prove a form of the following.

loveridgei. **P. loveridgei** *Prout.* Similar to *perpulverata*. Hindtibia of ♂ with pencil and terminal process. Wings slightly less narrow, more variegated. Forewing with a tinge of green costally, an irregular dark central shade

or band, some dark shading proximally to the subterminal, especially in anterior half, the subterminal itself, or the entire terminal area more or less pale. Hindwing rather less densely irrorated. Tanganyika Territory and Kenya.

26. Genus: **Gelasmodes** *Prout.*

Differs from *Thalassodes* and *Prasinocyma* in having the 1st subcostal of the forewing stalked with the others, instead of arising from the cell, and in having the antenna of the ♀ strong pectinated. Hindwing with 1st median not stalked. Erected for a single species.

G. fasciata *Warr.* (3 h) is easily recognized by its structural characters, white ground-colour and irregular green bands. Described from Nigeria, but reaches Gold Coast and Gaboon. *fasciata.*

27. Genus: **Idiochlora** *Prout.*

To this Indian genus — perhaps, however, merely a subgenus of *Metallochlora* — may be referred one Madagascar species which stands somewhat apart. The antenna of the ♂ lacks the fascicles of cilia which characterize *Metallochlora*, the abdomen is entirely without crests and the larger size and less smooth scaling give it a different appearance. The African species of *Metallochlora*, nevertheless, and especially *melanopis Prout*, are in some respects intermediate. Palpus with 3rd joint moderate in ♂, long in ♀.

I. cinctuta *Saalm.* (5 a) differs from the Indian genotype, *ophthalmicata* Moore, in the more irregular distal margins, dark teeth on the postmedian and more rounded cell-spot of hindwings. — ab. **dentata** *Mab.* has the cellring of the hindwing minute or obsolete. Madagascar. *cinctuta.* *dentata.*

28. Genus: **Metallochlora** *Warr.*

Essential structure as in the well-known *Hemithea* (vol. 4, p. 23) except that the hindtibia of the ♂ has all the spurs present. The typical Indo-Australian group has the abdominal crests metallic, the wings bright yellow-green, but the African ones, which are really outliers or perhaps fully spurred *Hemithea* or *Chlorissa*, show the general facies of these latter.

M. melanopis *Prout* (5 b). A relatively very large species, with black face, blackish crests (slightly metallic) deep-green wings and spotted fringes. Angle of hindwing sharp. Ja River, Cameroons. *melanopis.*

M. misera *Prout.* Shape of *melanopis*, but very much smaller (18—23 mm), very dull grey-green or rather deep olive-grey, the white lines not or scarcely broken into spots, highly zigzag; distal margins with white spots; fringe not spotted. Face dull green. This and the following are extremely like some dull-coloured *Hemithea.* Ivory Coast; ? Upper Congo. *misera.*

M. grisea *Prout.* More glossy, intermediate in colour towards *glacialis* (2 k). Probably very closely related to this latter, but with a bright buff patch on the abdomen dorsally, slightly mixed with red and bearing rather strong, lighter buff crests. Face bright red. Founded on a ♀ from Congella, Durban. *grisea.*

M. glacialis *Butl.* (= zebraea *Saalm.*) (2 k). A very small species, the grey wings with strong violet reflections. Face less bright red. Maculation of abdomen and crests black, the crests smaller than in *grisea.* Madagascar. *glacialis.*

M. dyscheres *Prout.* Systematic position uncertain, the short palpus and nearly simple antenna (slightly lamellate) suggesting a *Pseudhemithea.* Hindtibia, however, with all the spurs present; a hair-pencil and rudimentary process. Face deep red. Abdomen variegated, the crests blackish. Wings dull green, the hindwing very bluntly angled at 1st radial and still more feebly at 3rd. Portuguese East Africa: Magude, only the type known. *dyscheres.*

29. Genus: **Chlorissa** *Steph.*

A widely distributed genus (Holarctic, Indian, Malayan and African), or perhaps better a subgenus of *Hemithea* with the abdominal crests wanting or very small, the hindwing not appreciably angled. The ♂ hindtibia has 2 spurs only; typically the ♀ has 4 spurs, but a few African species have only 2 fully developed and should perhaps be referred to *Neromia Stgr.* (see Vol. 4, p. 26), but are so very closely connected with the 4-spurred species that it seems impossible to separate them generically. The African *Chlorissa* are nearly all excessively similar and at least as difficult to work out as the *Prasinocyma*, though apparently much less numerous.

A. Hindtibia of ♀ with 4 spurs.

allochroma. **C. allochroma** *Prout.* Expanse 24 mm. Broader-winged than *albistrigulata*, lines more strongly sinuous, coloration cinnamon-rufous. Palpus of the ♀ over twice as long as diameter of eye. Hindwing with hindmargin long, distal margin slightly waved, very slightly prominent at 1st radial more so at 3rd. Ivory Coast: Bingerville.

albistrigulata. **C. albistrigulata** *Warr.* (= ? hintzi *Strand*) (2 k). Probably this, the Palaearctic *faustinata Mill.* (Vol. 4, p. 25) and the Indian *discessa Walk.* (formerly erroneously called *solidaria*) will all prove to represent a single species. Rarely obtained in good condition, but easily known by the dark shades which accompany the sinuous *vermiculata.* white lines. — ab. **vermiculata** *Warr.* is a very weakly lined form. The species is distributed throughout Africa and has been taken on São Thomé.

stibolepida. **C. stibolepida** *Butt.* (= pallidularia *Mab.*) (2 k) is perhaps a well-defined island race of the preceding, white with scarcely a tinge of green, the postmedian line less strongly sinuous. Abundant on Madagascar; known also from the Comoro Islands.

tanyptera. **C. tanyptera** *sp. n.* (3 h) 24 mm. Face green. Palpus in ♀ with 3rd joint almost equal to 2nd. Antenna in ♂ strongly dentate-fasciculate. Abdomen with the crests rudimentary. Forewing in ♂ with apex slightly produced, in ♀ normal; deep grapegreen (or "pois green" of Ridgway), with white irroration, notably in distal area; cell-spot and lines deeper green, the lines thick and indistinct. Hindwing with distal and hind margins longer than in the other species. Principé, 1500—2000 feet (T. A. Barns), a pair in the Joicey collection.

dialeuca. **C. dialeuca** *sp. n.* (3 h) and the species which follow have the white lines much straighter than in *albistrigulata*, rarely dark-edged, the face green; *dialeuca* has some whitish irroration, the white postmedian line rather broad and distinct, on the forewing slightly more oblique than the distal margin. Underside more green than in *approximans*. Hindtibia of ♂ with a hair-pencil enclosed in a sheath. SC^1 not stalked with SC^{2-5}, not or scarcely anastomosing with the costal. Kenya Colony, perhaps also Abyssinia and Tanganyika Territory.

subrufibasis. **C. subrufibasis** *sp. n.* (3 h) is closely similar to the preceding, but the postmedian line is perhaps rather less firm and less oblique; the forewing beneath has a red proximal suffusion, especially in the costal part. moreover, the hindtibia of the ♂ is scarcely dilated, SC^1 generally stalked beyond 1st radial and anastomosing strongly with C, the antennal joints somewhat more projecting. Kenya Colony, Kivu and Kilimandjaro; rather common about Nairobi.

attenuata. **C. attenuata** *Walk.* (= ? reductata *Walk.*) (3 h). Lines more slender, often with indications of dark edging, the postmedian of the hindwing curved; dark cell-dots often indicated. Distal part of antenna reddish. Abdomen generally with noticeable (often reddish or blackish) crests. Hindtibia of ♂ dilated, almost as in *dialeuca* (3 h). Cape (loc. typ.) to Kenya Colony. Venation variable; SC^1 in the South African forms not or scarcely stalked, scarcely ever arising beyond 1st radial; in the East African with a little more inclination to stalk, but still quite generally arising before 1st radial. — From West Africa comes an insect which I suppose to be arace. Scarcely different except in its smaller average size and in having SC^1 longerstalked, thus combining *eborilitoris.* the venation of *subrufibasis* with the hindtibia of *attenuata*; crests undeveloped: f. **eborilitoris** *nov.* Bingerville, Ivory Coast (G. Melou), 2 pairs in Mus. Tring. Also numerous examples, mostly in bad condition, Sierra Leone, French Guinea, Nigeria, Cameroons, Congo.

afflictaria. **C. afflictaria** *Swinh.* is intermediate between *attenuata* and *dorsicristata*, the cell-dots strong, the postmedian dark-edged, nearly straight, that of the hindwing continuing that of the forewing. Abdominal margin of hindwing relatively rather long. Hindtibia of ♂ with hair-pencil. Crests not dark-coloured. Sierra Leone; Ivory Coast; ? Gold Coast; ? Nigeria; Cameroons.

dorsicristata. **C. dorsicristata** *Warr.* has a red-brown patch on the abdomen anteriorly bearing 2 black crests. Rather greyer green than the allies, cell-spots larger, postmedian line slightly bent inwards at fold. Hindtibia of ♂ scarcely, if at all, dilated. Forewing with 1st subcostal stalked. Natal.

cremnobates. **C. cremnobates** *sp. n.* (3 h). ♂, 22—26 mm; ♀, 27—29 mm. Palpus of ♀ with 3rd joint somewhat elongate. ♂ with joints of antenna somewhat projecting, hindtibia with a very slender pencil, perhaps sometimes wanting. ♀ with proximal spurs of hindtibia short. Forewing with SC long-stalked (well beyond 1st radial which, like 1st median, is from the end of the cell or shortly stalked), nearly always anastomosing with costal. Colour of *attenuata* and *approximans*, markings nearly as in *dorsicristata* but weaker. Possibly a large race of the last-named. Kikuyu Escarpment, 6500—9000 feet, December 1900, January and March 1901 (W. Doherty), 10 ♂♂ and 2 ♀♀ in Mus. Tring. Also known from Nairobi and perhaps Nyasaland.

B. Hindtibia of ♀ with 2 spurs (rarely also vestiges of the others).

apographa. **C. apographa** *sp. n.* (3 i). Confusingly like *cremnobates* and occurring with it (the ♂♂ in January-February, the ♀♀ in March). Smaller (♂, 19—21 mm; ♀, 24 mm), hindwing and its postmedian line perhaps more rounded. ♂ antenna with joints less projecting. ♀ palpus with 3rd joint appreciably shorter. Abdominal

crests wanting or slight. Hindtibia of the ♂ with a short hair-pencil; of the ♀ with proximal spurs vestigial (only one leg not lost). Forewing with SC¹ not or only very shortly stalked, opposite or proximal to 1st radial. 7 ♂♂ and 2 ♀♀ in Mus. Tring.

C. approximans *Warr.* (3 i). Hindtibia of ♂ not dilated. From *subrufibasis* distinguishable by the more slender postmedian line, SC¹ of forewing not or scarcely stalked, red or black abdominal crests developed; from *dorsicristata* by the colour and markings. — ab. **malescripta** *Warr.* has the lines less white. — ab. **unilinea** *Warr.* has the antemedian line very ill-developed. — Described from Natal; closely similar forms are found from Abyssinia of the Cape and on the Comoro Islands. *approximans. malescripta. unilinea.*

C. inornata *Prout* (3 i), which I at one time merged with *approximans* as an ab., differs materially in the ♂ genitalia — coremata much reduced, juxta, costal fold of valve and aedoeagus differently shaped, etc. Otherwise extremely similar and with nearly identical structure, on an average rather smaller, abdominal crests almost entirely green, wings slightly darker and rougher-scaled. Transvaal and Natal. *inornata.*

C. articulicornis *Prout* (3 i) approaches *dialeuca* and *subrufibasis* in the clearness and straightness of the white postmedian line, but the ♂ antenna has more strongly projecting joints. From the other species with 2-spurred ♀ hindtibia, *articulicornis* differs not only in the ♂ antenna but in the non-dilated hindtibia and the long stalking of SC¹. The type-form has the abdominal crests green. — ab. (?) **rufricristata** *Prout* has the crests red. — Described from Barberton, *articulicornis* or forms with the same essential structure are found from Uganda and Kenya to Angola and Natal. *articulicornis. rufricristata.*

30. Genus: **Neromia** *Stgr.*

The type of this genus, *iodisata Stgr.*, which has hitherto been sunk to *pulvereisparsa Hmpsn.*, belongs to the Palaearctic Region and the genus has been discussed in Vol. 4, p. 26. Now that it is known that some African *Chlorissa* have only 2 spurs on the ♀ hindtibia, only the scaling and coloration remain to distinguish it from section B of *Chlorissa*, and it is probable that it may need to be suppressed. There are, however, apparent transitions from it to a somewhat extensive African group with shorter palpi in both sexes (except in *clavicornis*-♀), the ♂ antenna generally without fascicles of cilia, in one or two species very shortly pectinate, and this group is provisionally retained here although, when we know its bionomics, a reclassification may be necessary. The hindwing has the distal margin smooth, except in *propinquilinea.*

N. pulvereisparsa *Hmpsn.* (5 b) is only known to me in a very few examples, its Palestine form *iodisata Stgr.* only in 2 ♂♂. Wings a little less elongate than in them, more thickly powdered or suffused with grey. Antenna ciliated in both sexes. Aden and Port Sudan. *pulvereisparsa.*

N. manderensis *Prout* (3 i). Similar in build to *pulvereisparsa* but greenish, the markings obsolete; only with very close attention a straight (not sinuous) postmedian may be discerned. British Somaliland. *manderensis.*

N. chlorosticta *Prout.* 21—22 mm. Face brown-red. Wings green with darker green cell-spots and finely dentate pale, but not conspicuous postmedian line, which on the hindwing is almost more strongly curved than the distal margin itself. Terminal line and fringe likewise green. Tanganyika Territory (loc. typ.), Kenya and Rhodesia. Exceptional in that the costal vein of the hindwing anastomoses with the cell at a point near the base or sometimes as far as to $^2/_5$ of the subcostal. *chlorosticta.*

N. picticosta *Prout* (5 b). Transitional towards *Chlorissa*, with similar white lines and the palpus not extremely short. Very pale green with dark-red face. Antenna of ♂ ciliated. Forewing with costal margin above elegantly dotted with red, beneath broadly red proximally. Madagascar, the ♂♂ fairly common near Antananarivo, the ♀ not yet known to me. *picticosta.*

N. phoenicosticta *Prout* (♀ = miltosticta *Prout*) (3 g). Broad-winged, bright green, with bright red face and large cell-dots and indistinct white lines. Abdomen and fringe marked with red in the ♂, with white in the ♀. Antenna short and stout, in the ♂ with rudimentary stout pectinations. Rhodesia and Nyasaland. *phoenicosticta.*

N. clavicornis *Prout* (3 h). Forewing less rather more pointed, of a less bright green, the cell-dots much smaller. ♂ antenna similar. ♀ with the palpus less short, though still slender. Dorsal ridge and fringe sometimes tinged with red, irrespective of sex. S. Rhodesia. *clavicornis.*

N. activa *sp. n.* (3 h). Slightly paler. Antennal pectinations a little less rudimentary, the longest ones just exceeding diameter of shaft. Abdomen without white longitudinal line. Forewing with distal margin slightly more oblique; SC¹ free (in *clavicornis*-♂♂ anastomosing with C); both wings without cell-dot, the lines distinct, the postmedian of the forewing curved near costa, that of the hindwing sinuous in posterior half, more distally placed than in *clavicornis.* · Rhodesia: Umvuma, 20 December 1917, type in coll. A. J. T. Janse. *activa.*

rubripunctilla. **N. rubripunctilla** *Prout* is very similar to *clavicornis* but certainly distinct; the ♂ antenna, though thick, lacks the projecting teeth and the ♀ antenna is shorter. On an average smaller, rather brighter green (yet not so light as in *phoenicosticta*), the cell-dots so minute as to be scarcely visible without a lens, fringes whiter. *barretti.* A rather conspicuous white dorsal ridge on abdomen. Transvaal, Bechuanaland and S. Rhodesia. — **barretti** *Prout*, from the Cape and Natal, is larger, though not on an average so large as *clavicornis*; otherwise it scarcely differs from *rubripunctilla* except in the entire absence of the red cell-dots.

strigulosa. **N. strigulosa** *Prout* (3 g). Bright green, nearly as in *phoenicosticta* but still more yellowish. Wings strigulated with white and without cell-dots, the forewing at least as pointed as in *clavicornis* and *rubripunctilla*; lines very faint. Antenna of ♂ very shortly pectinate. Palpus and abdomen as in *rubripunctilla*. S.W. Africa.

propinquitilinea. **N. propinquilinea** *Prout* (3 i) is nearest in coloration to *strigulosa* (3 g) but irregular in shape, both wings being somewhat bent at the 3rd radial; minute reddish cell-dots visible with the lens. ♂ unknown; ♀ antenna lamellate, with curved teeth nearly as long as diameter of shaft. Senegal.

cohaerens. **N. cohaerens** *Prout* (3 k). Both sexes with forewing a little more pointed than in *strigulosa*, hindwing a little more rounded. Paler green, not strigulated, lines wanting. Palpus quite short. Antenna in both sexes simple. Transvaal; ? Kenya.

quieta. **N. quieta** *Prout* (= anomala *Swinh.*, nec *Warr.*), described as a *Prosomphax*, but with only one pair of hindtibial spurs, perhaps belongs here. Shape as in *cohaerens* or very slightly narrower; larger (35 mm), forewing with 1st subcostal shortly stalked, both wings with 1st median well stalked; paler, the hindwing almost white. ♂ unknown. Founded on a ♀ from Machakos, Kenya Colony.

enotes. **N. enotes** *Prout* (5 b). Antenna of ♂ dentate, with short ciliation. Palpus minute, tongue vestigial, otherwise the species might be considered a *Chlorissa*. Face deep red, mixed with black. Closely resembles *carnifrons Butl.* from India. Gambia.

impostura. **N. impostura** *Prout* (3 k) is very dissimilar, mimicking a *Lophostola*, but with the cell-spots smaller, though similarly pale-surrounded, the abdomen with dark dorsal spots instead of crests. An indistinct dentate white postmedian line, a brown terminal line and white, brown-spotted fringes. Palpus very small. Antenna of ♂ short and thick, almost simple. Natal.

rhodomadia. **N. rhodomadia** *Prout*. Smaller (24 mm). Abdomen in addition with some white spots and crests. Antenna of ♂ lamellate. Wings rather narrow; yellowish green, with minute red cell-dots, lines obsolete, some red, black-mixed, markings consisting of a large patch at base of forewing and terminal spots at the radials and at tornus on both wings, connected by a line and containing some white or pale spots; the tornal spot of forewing large; fringes white, irrorated with red; black-mixed spots at the end of the veins. Lorenzo Marquez.

31. Genus: **Blechroneromia** *Prout.*

An offshoot of *Neromia* with more strongly pectinated ♂ antenna and that of the ♀ also pectinate, the wings generally with less simple pattern. Only known from the mountains of Central Madagascar.

mianta. **B. mianta** *Prout* (5 b). Face green, paler below. Thorax and abdomen marked above with black. Wings heavily marked with blackish fuscous. ♀ larger than ♂, with more extended markings.

eluta. **B. eluta** *Prout* (5 b). Very similar, but paler, more diaphanous, the markings shadowy, the hindwing less rounded; thorax and abdomen not black-marked.

perileuca. **B. perileuca** *Prout* (5 b). Abdomen with white, partly red-bordered spots. Wings more weakly marked. Distal margins with red vein-dots; costal margin of forewing white, fringes whitish.

anthosyne. **B. anthosyne** *Prout* (5 b). As the unique type has lost the hindlegs, this may perhaps be really a *Heterorachis*. Very distinct in pattern from all the other species of the genus.

32. Genus: **Neurotoca** *Warr.*

Antenna short, in both sexes pectinate as in *Blechroneromia*, from which it differs chiefly in the loss of the tongue, which is fully developed in *Blechroneromia*. Palpus still shorter. Abdominal crest less rudimentary. Only one species.

notata. **N. notata** *Warr.* ♂ 27 mm, ♀ 35 mm. Bright green, with red-brown patch on abdominal margin, rather smaller than that of *B. anthosyne* and not pale-centred; no cell-dots; a firm white postmedian line instead of

the small vein-dots. Abdomen above predominantly reddish. Tanganyika Territory, only 2 examples known. — **endorhoda** *Hmpsn.* (2 h, 3 k), from Rhodesia, and Transvaal, is at most a race, perhaps eventually a synonym, *endorhoda.* but appearing slightly rounder-winged and with the blotch on hindwing somewhat enlarged.

33. Genus: **Pseudhemithea** *Bastelb.*

Differs from *Hemithea* in its minute palpus and generally in the somewhat different shape of the wings, the hindwing being somewhat angled at the 1st radial. Antenna simple, or extremely shortly ciliated. Tongue generally slight. Abdominal crests generally strong.

A. Hindtibia with 4 spurs.

Ps. exomila *Prout* is aberrant in shape, the hindwing being very slightly angled at 3rd radial but not *exomila.* at 1st radial. Antenna of ♂ perceptibly ciliated (less than ½ diameter of shaft). Crests very slight. Face red. Wings dull olive-green, slightly irrorated with white; postmedian line broad, white, shaped nearly as in *saturata.* S. Cameroons: Ja River.

Ps. euopla *sp. n.* ♂, 28 mm. Face deep red, mixed with black. Vertex white. Antenna scarcely *euopla.* ciliated. Crests on 2rd and 3rd tergites reddish, surrounded with blackish. Wings rather light grape-green, with rather elongate darker cell-marks; a moderately strong olivaceous postmedian line, shaped nearly as in *saturata*, forewing in addition with a sinuous antemedian. Kenya: Kibwezi, December 1920 (W. Feather), type in Mus. Tring.

B. Hindtibia with 2 spurs.

Ps. saturata *Prout* (3 k). Darker than the preceding, grey rather than green. Palpus rather less minute. *saturata.* Face deep red, but not mixed with black. ♂ antenna simple. Abdomen with 3 or 4 crests. Hindleg of ♂ as in *detrita.* Forewing with dark-dotted costal edge. Cell-spots enlarged. Postmedian line pale- (or white-) bordered distally. Nigeria. Since obtained by Mr. L. Collenette in French Guinea.

Ps. detrita *Bastelb.* (5 c). Rather larger and more robust, with somewhat hairy femora. Hindtibia *detrita.* dilated, with strong hair-pencil. Palpus scarcely more than ½ diameter of eye. Face red. Angola: Pungo Andongo, 2 ♂♂ (Bastelberger in litt.; not 1 ♂, 1 ♀, as first assumed).

34. Genus: **Lathochlora** *Warr.*

Perhaps another development of the *Hemithea* group, still very imperfectly known. Palpus moderately long. Antenna in ♂ (of *perversa*) serrate-dentate, with fascicles of cilia. Hindtibia in both sexes with 2 spurs. in ♂ with hair-pencil. Wings thinly scaled, somewhat iridescent; forewing with all 5 subcostals long-stalked, the 2nd subcostal far beyond the 5th; hindwing with termen dentate at 1st radial and 3rd radial, excavated between (type) or tailed at 3rd radial, like an *Iodis* (*perversa*).

L. inornata *Warr.* (3 i). ♂ still unknown. ♀ somewhat recalling the Indian *Diplodesma xanthochlora* *inornata.* *Swinh.*, distal margins more excavated, dark band less distal, bounded by a pale curved line. Crests wanting (?). Nigeria (type) and Ivory Coast.

L. perversa *Prout* (3 i). Aberrant in having 3 red-brown abdominal crests and in the shape of the wings. *perversa.* Facies of an *Iodis* or a washed-out *Hemithea* or *Metillochlora*, the large cell-spots rather distinctive; costal margin of forewing with dark dots and dashes. Ivory Coast (loc. typ.) Oubangui-Tchari-Chad and Cameroons, perhaps also Uganda.

35. Genus: **Chlorocoma** *Turn.*

An Australian genus, or perhaps section of *Prasinocyma*, distinguished by the shorter palpus (not longer than diameter of eye), with 3rd joint minute in both sexes. It is almost certain that the few African species which have been referred to it are merely *Prasinocyma* with abnormally short palpi and they are probably connected by some intermediates which we have left in that genus. But in order to avoid unnecessary taxonomic changes in the present work, we continue to quote them here.

C. didita *Walk.* (4 a). Face red. Hindtibia of ♂ not dilated. Forewing with 1st radial not (as in the *didita.* Australian *Chlorocoma*) stalked with the last 4 subcostals. Green without the strigulation of typical *Prasinocyma*, both wings with a minute brown cell-dot; forewing with costal edge ochreous. Cape, not uncommon. ? Transvaal.

cucela. **C. eucela** *Prout.* Expanse 21 mm. Hindtibia of ♂ dilated. Antennal shaft white, spotted with red. Forewing with 1st subcostal anastomosing with costal. Colour of *dididа*, but with the cell-dots darker green, not brown. Face brighter red than in the most similar *Prasinocyma* (*scissaria*, *tranquilla*), palpus shorter. Pretoria, only the type ♂ known.

clopia. **C. clopia** *Prout* (4 a). Still more similar to *Prasinocyma*, the wings being a little broader than in the two preceding, rather more bluish green and with very fine whitish strigulae. Antennal shaft not spotted with red. Cell-spots scarcely darkened. Pretoria North.

dilatata. **C. dilatata** *Walk.*, ostensibly from South Africa (Dr. Andrew Smith) is almost certainly Australian, apparently indistinguishable from a worn ♀ of *assimilis T. P. Luc.* Macleay went to Tasmania in 1839 and was working out his insects at the same time to which Walker's type is assigned, so that some confusion of labelling may have occured.

36. Genus: **Heterorachis** *Warr.*

Perhaps a section of *Omphax*. Palpus similarly minute. the wings often equally devoid of markings, the only constant difference is that the antenna of the ♀, as well as that of the ♂, is pectinate. Abdomen with or without crests. Hindtibia with 4 spurs. Hindwing generally rounded; 1st median well separate or (*melanophragma* and the subsequent species as far as *tornata*) often stalked. Entirely African.

insueta. **H. insueta** *Prout* (5 c) is an anomalous species, with the palpus scarcely so short as in true *Heterorachis*, the wings with the iridescence and markings of an *Iodis*. Crests bordered with orange-red. Wings grey-green with purplish reflections or in the only known ♀ almost entirely purple. Diego Suarez, Madagascar.

asyllaria. **H. asyllaria** *Swinh.* is possibly a form of *diaphana* (~~5 c~~ 4 a), but is generally larger, with the inner margin of the hindwing relatively longer. Terminal dots very slight, the cell-dots, on the other hand, well developed. Venation as in *diaphana*. Madagascar.

diaphana. **H. diaphana** *Warr.* (4 a) resembles a *Prasinocyma* in its colour and short white strigulae, but differs in the very short palpus and pectinate ♀ antenna. Face red. Crests slight. Both wings with 1st median widely separate. Cell-dots small but sharply black. Minute terminal dots, sometimes visible only with the lens. Madagascar.

malachitica. **H. malachitica** *Saalm.* (2 i). A pretty species, the lines marked by white vein spots, the terminal line blackish, the fringes tipped with brown, otherwise white with sharp dark spots at the veins. Madagascar.

trita. **H. trita** *Prout* (4 a). Much smaller, much deeper green, without markings except at the termen, which bears pnre white, dark-edged lunules; costal edge reddish; fringes rosy, proximally mixed with black. Diego Suarez. Like the *devocata* group but with the 1st median of both wings separate.

dichorda. **H. dichorda** *Prout* (3 k). Very distinct in its bright green colouring and strongly marked lines. Crests red-brown. Widely distributed: Senegal, S. Sudan, Uganda, Keyna and Tanganyika, the type from the last-named locality.

prouti. **H. prouti** *B.-Baker* (3 k). Much paler, more delicate green, really white with dense green irroration. Abdominal crests white, forming a ridge. Both wings with the 1st median arising close to the 3rd radial; the white lines finely edged in median area with bright yellow. Angola (type), Rhodesia, Gold Coast, Bahr-el-Ghazal, Kenya, Angoniland.

perviridis. **H. perviridis** *Prout.* Expanse 37 mm. Bright, opaque green as in *Omphax*, which indeed it altogether resembles except in the ♀ antenna, which has strong pectinations, the proximal ones over twice the diameter of the (very broad) shaft. The ♂ is still unknown, perhaps not distinguished from the following. Face purple-red. Abdomen above concolorous with wings. Fringes green, at the tips whitish. Transvaal: Pretoria.

simplicissima. **H. simplicissima** *Prout* (3 k). Rather smaller (♀ 33 mm), pectinations in ♂ 4 or 5 times width of shaft, in ♀ scarcely 1. Tip of abdomen and of fringes white. Both wings with costal margin slightly less elongate then in *perviridis*. Transvaal and Natal.

simplex. **H. simplex** *Warr.* (= haploa *Prout*) (4 a). Extremely similar to *simplicissima*. Pectinations of the ♂ antenna about 3 times the diameter of the shaft; those of the ♀ about twice the diameter of the shaft. The wings are of a rather less deep and bright green than in *simplicissima*, but it is difficult to obtain unfaded specimens. It very strongly recalls *Omphax leucocraspeda Prout* (4 b) but is bluer green, with the frings green proximally. Described from the Kikuyu Escarpment. Specimens from Nyasa and Rhodesia, which I have doubtfully referred here, seem to have somewhat shorter pectinations in both sexes.

H. disconotata *Prout* is paler and less bright, more thinly scaled, than *simplex* (much like *Chlorocoma clopia*), has the apex of the forewing acute, the forewing with a slight, the hindwing with a conspicuous, dark-green cell-spot. ♂ unknown; ♀ with the pectinations as in the two preceding. Barberton, Transvaal. *disconotata.*

H. fuscoterminata *Prout* is distinguished by having a brown, black-mixed terminal line and the white fringes bearing small dots at the veins. Apex of forewing rather sharp. ♀ pectinations slender, as in the three preceding. Natal. *fusco-terminata.*

H. melanophragma *Prout* (4 a). Distal margin of forewing a little more oblique than in most *Heterorachis*. Much smaller than *malachitica*, cell-dots mixed with reddish, the white vein-dots small, but generally connected by a very fine line, the markings of the fringe less sharply defined. Hindwing with 1st median not separate, usually stalked. Diego Suarez. *melano-phragma.*

H. despoliata *Prout* has the red, black-mixed crown, antennal shaft and base of costa which characterize *devocata*, but has much simpler borders; a weaker dark terminal line than in *melanophragma*; fringe paler than in *devocata*. Transvaal. *despoliata.*

H. devocata. Antennal pectinations in both sexes moderately long. Hindwing with 1st median stalked or from apex of cell. Three races are distinguishable. — **devocata** *Walk.* (4 a) has the red head and margins strongly darkened, the spot at tornus of forewing well developed, the fringes red-brown. Natal. — **roseifimbria** *subsp. n.* has the red parts much brighter, the tornal spot reduced, the fringes also brightly rosy. Transvaal, the type from Sabie, December 1911 (W. GRUBB) in coll. PROUT. — **mozambica** *Prout* is a dwarf form with nearly the colouring of *devocata* but the tornal spot reduced. Mozambique. A few specimens which I have seen from Rhodesia and from Kenya Colony (low altitudes) nearly agree with this. *devocata.* *roseifim-bria.* *mozambica.*

H. gloriola *Th.-Mieg.* As small as *mozambica*. Antennal shaft and costal margin of forewing white, the latter beneath slightly rosy proximally; the red-brown terminal line very pale; fringes white. Hindwing beneath whitish. Delagoa Bay, 1 ♂. Perhaps a very pale aberration of *mozambica*, in which case the latter name will sink. *gloriola.*

H. chloë *Th.-Mieg.* Size of *gloriola*. Antenna similar. Forewing relatively acute. Fringes pale greenish proximally, white distally. Both wings with a dark cell-dot; no terminal lines. Face reddish brown; vertex white; occiput green. Delagoa Bay, 2 ♂♂. *chloë.*

H. lunatimargo *Prout* (4 b). At least as large as *devocata*. Hindwing bluntly angled. Named from the conspicuous whitish terminal lunules, which are finely bordered with red-brown proximally and distally. First subcostal of forewing stalked with the others. Congo (the type), French Guinea, Gold Coast and Nigeria; perhaps also Kenya Colony. *lunatimar-go.*

H. carpenteri *Prout* is extremely similar to *lunatimargo*, but considerably smaller (20—24 mm) and with long terminal joint to the ♀ palpus, thus not a typical *Heterorachis*. Discovered on the Sesse Archipelago by Dr. CARPENTER but also known from Sierra Leone, the Ivory Coast and S. Nigeria. *carpenteri.*

H. idmon *Fawcett* (5 c) differs from *lunatimargo* in its broader borders and has the hindwing rather less angled, 1st subcostal of forewing not stalked. Kenya Colony. *idmon.*

H. tornata *Prout* (4 b) is similar to *trita* but smaller, at least in the ♂. Face more mixed with black; vertex and base of antenna reddish (in *trita* white). Border of forewing broadening behind 2nd submedian into a small blotch. Hindwing with 1st median stalked or from a point with 3rd radial. Both wings with a darker green cell-dot. Madagascar: Diego Suarez. *tornata.*

H. triangularia *Swinh.*, founded on a single ♂ from Madagascar, is doubtfully placed, perhaps a strongly peetinate offshoot of *Bathycolpodes*, with which it agrees in its black face and its underside (nearly as in *B. subfuscata*). Expanse 23 mm. Borders less irregular than in *B. subfuscata*, costal border of forewing also pale, the green ground-colour on forewing forming a triangle. Hindwing with distal margin extremely weakly concave between the radials. *triangu-laria.*

H. (?) diphrontis *Prout* (4 b) has much more extended markings than any other *Heterorachis* and they are generally lighter, less red. Aberrant in having the tongue quite rudimentary. Hindwing with 1st median separate. Madagascar: Diego Suarez. *diphrontis.*

H. (?) insolens *Prout* (4 b), described doubtfully as an aberrant *Neurotoca*, may be placed here, but is also aberrant in its rudimentary tongue and further deviates in having lost (or nearly lost) the proximal spurs of the ♂ hindtibia, while in the ♀ they are short and closely approximated to the terminal ones. Crests wanting. Head, antenna and base of costa bright red, as in *Omphax rhodocera* (2 h). S. Rhodesia. *insolens.*

37. Genus: **Celidomphax** *Prout.*

Differs from *Heterorachis* chiefly in the presence of a series of strong abdominal crests and in the non-pectinate antenna of the ♀, while that of the ♂ is strongly pectinate. Palpus short. Wings finely strigulated, as in *Prasinocyma*; apex of forewing somewhat more acute than in typical *Heterorachis*; hindwing with 1st median stalked. The species are closely related, possibly even forms of a single, highly variable species.

rubrimaculata. **C. rubrimaculata** *Warr.* (4 b) is known by the large (though variable) blotches at anal angle of each wing, combined with an anterior terminal spot on forewing. Best known from Natal, but reappears in Senegal.

anatiptaga. **C. analiplaga** *Warr.* has the terminal markings confined to the anal angle of the forewing and even here very small, occasionally wanting. Described from Tanganyika Territory, but widely distributed from the White Nile to Natal and S.W. Africa.

prolongata. **C. prolongata** *Prout.* Like *analiplaga* but with the forewing rather more elongate, the hindwing with longer distal and abdominal margins and bent at 3rd radial, the shape recalling *Thalassodes*. Lado Enclave; ? Uganda.

38. Genus: **Omphax** *Guen.*

Palpus short or minute. Tongue short. Antenna in the ♂ pectinate or simple, in the ♀ simple. Abdominal crests slight, sometimes wanting. Hindtibia with all spurs. Wings generally without markings; distal margins smooth; hindwing with 1st median separate from 3rd radial (except in *nigricornis*). A small group of African species, especially from the South and East, mostly closely related.

A. Antenna of ♂ pectinate.

vicinitaria. **O. vicinitaria** *Wllgrn.* is unknown to me, but probably belongs here. 26 mm. Pectinations "obsoletius capitatae", that is, I suppose, somewhat thickened at their tips. Hindwing rounded. Uniform green above and beneath, paler than in *plantaria*. "Eastern Caffraria". A Natal species which agrees with the description except that the tips of the frings are white, has the wings rather narrower and duller than in *leucocraspeda*.

leucocraspeda. **O. leucocraspeda** *Prout* (4 b) is distinguishable by its white fringes. Face bright red. Transvaal (loc. typ.), S. Rhodesia, Barotse and Angola.

rigua. **O. rigua** *sp. n.* Expanse 28—29 mm. Near *leucocraspeda*. Lower ⅓ of face white. Wings broader, strongly strigulate with white, fringes green proximally, white distally. South Central Angola (T. A. Barns), 2 ♂♂ in coll. Joicey.

nigricornis. **O. nigricornis** *Warr.* Smaller, rather more robust, forewing relatively shorter; crown of head and base of antenna reddish (in *leucocraspeda* white), pectinations longer; wings darker green, the fringes not white. ♀ unknown. Probably a *Heterorachis*. Mombasa.

rubriceps. **O. rubriceps** *Warr.* (= monophyes *Swinh.*) (4 c). Rather less small than *nigricornis*, hindwing less long. Head and proximal half of antenna deeper red; pectinations very short (scarcely longer than diameter of shaft); *ornatimargo.* terminal black dots and red-tinted fringe recall *plantaria*. Angola. — **ornatimargo** *Prout* is probably an aberration or local form of *rubriceps*. It differs in having a series of somewhat triangular reddish-fuscous terminal spots on the veins, generally connected by a fine terminal line; fringes in the type more strongly spotted than in *rubriceps*. Nigeria; similar forms in Gold Coast and Belgian Congo.

rhodocera. **O. rhodocera** *Hmps.* (2 h). Rather larger than *rubriceps*, the pectinations a little shorter still; termen without dark dots; fringe buff, with a faint indication of pinkish spots distally. More sprinkled with white than in the other species, though our figure somewhat exaggerates this. The type ♂ (not "♀", as given by Hampson), from N.W. Rhodesia, has the hindwing less fully rounded than usual, but otherwise specimens from N. of Lake Nyasa, the Transvaal and other parts of Rhodesia agree well with it.

B. Antenna of ♂ simple.

shorti. **O. shorti** *Prout* (4 c). A beautiful species, quite unlike any other *Omphax*. The type form is only known *homalotis.* from Selukwe, S. Rhodesia. — **homalotis** *subsp. n.* is smaller (29 mm) and lacks the hindmarginal expansion of the distal bands. Limbe, Nyasaland, November 1925 (H. Barlow), in coll. Joicey.

plantaria. **O. plantaria** *Guen.* (= rubriplaga *Warr.*) (6 a). is the commonest *Omphax* and not very variable. The two abdominal crests, though small, are generally conspicuous, being reddish or fuscous. The black terminal dots *subaspersa.* are set on a fine pale line. Underside paler, especially in the ♀. — ab. **subaspersa** *Warr.* is the commonest ♀ *apicata.* form, and has the underside more or less sprinkled with grey atoms. — ab. (?) **apicata** *Warr.* is a paler form,

with the crests apparently almost obsolete, but as it was founded on faded specimens it is perhaps in reality almost a synonym. *plantaria* is distributed from Kenya Colony to the Cape. — **rhodampyx** *form. n.* (? *sp.*) differs in having the vertex of the head rosy, not white, the costal edge bright red. "Abyssinia", a ♂ in Mus. Berlin. *rhodampyx.*

O. modesta *Warr.* is smaller (31 mm), apex of forewing more rounded, terminal dots almost obsolete. "South Africa", the type in poor condition, perhaps an abnormal specimen of *plantaria.* *modesta.*

O. marginata *Warr.* Possibly also an aberration of *plantaria.* The cream-coloured terminal line has more minute black dots and the fringes are paler at their tips; costal margin of forewing beneath more broadly red; ♀ beneath without grey dots. Founded on a ♀ from Tiapang. A similar form occurs at Mfongosi, Zululand. *marginata.*

O. idonea *Prout.* Rather narrower winged than *plantaria*, distal margins smoother, apex of forewing not produced. Terminal dots altogether wanting, fringe rather uniform rose colour, without pale tips and darkened central line. Transvaal. *idonea.*

O. bacoti *Prout* (4 e), with elongate wings and whitish hindwing, perhaps represents a separate genus, or an aberrant *Rhadinomphax* with the costal vein of the hindwing not anastomosing. In the forewing, the 1st subcostal generally anastomoses with both the costal and the 2nd subcostal. Abdomen not crested. Natal; also known from Bechuanaland and Transvaal. *bacoti.*

39. Genus: **Prosomphax** *Warr.*

This genus was founded by Warren on the type *callista* and was mistakenly supposed to differ from *Omphax* in having only one pair of spurs on the hindtibia. I have corrected this (Ann. Transv. Mus. VIII, p. 152) and pointed out that actually it only differs from some pectinated *Omphax* in having the palpus less minute (fully as long as diameter of eye) the costal vein of the hindwing approximated to the subcostal about to the middle of the cell; 1st median of hindwing not separate from 3rd radial. From *Chlorocoma* it differs in its white hindwing, with elongate costal margin, and longer approximation of costal vein to subcostal.

P. anomala *Warr.*, formerly referred to *Omphacodes* or *Omphax*, must be transferred here. Build rather slender. Antennal pectinations of ♂ moderately long. Expanse 32 mm. Forewing with costal margin curved, apex rather sharp; rather dull bluish green, with darker green cell-dot. Kikuyu and Mau Escarpments. *anomala.*

P. callista *Warr.* (4 c) is shaped more like a *Rhadinomphax.* Forewing brighter green than in *anomala*, with white dots and strigulations. Cape Colony and I think Natal. *callista.*

P. deuterurga *Prout.* Expanse 33 mm. Forewing paler green than in *callista*, the silvery irroration and strigulation smaller and sparser, scarcely noticeable; costal edge narrowly tinged with fleshy ochreous; fringe pale green, tipped with whitish. Founded on a ♂ from Krantzkloof, Natal. A rather smaller ♀ from Orange Free State probably belongs with it. *deuterurga.*

40. Genus: **Rhadinomphax** *Prout.*

A narrow-winged relative of *Omphax.* Palpus about as long as diameter of eye. Tongue developed. Antenna of ♂ dentate or very shortly pectinate. Forewing with anastomoses between the subcostal veins. Hindwing with the costal anastomosing with the cell to near its end. All the species are South African.

Rh. pudicata *Walk.* Distinguished from *divincta* chiefly by the ♂ antenna, which bears short pectinations, scarcely as long as the diameter of the shaft. In the name-typical form, moreover, the fringes are tipped with pink. Knysna. — ab. (?) **frondinata** *Feld.* (2 i), is larger and has the tips of the fringes white. *pudicata.* *frondinata.*

Rh. divincta *Walk.* (4 g). In this and the two following species, the ♂ antenna is merely dentate. In *divincta* the forewing is of a uniform green, with the fringe paler. Cape, and reaching the Transvaal. *divincta.*

Rh. sanguinipuncta *Feld.* (2 i) differs from *divincta* in having a rosy cell-spot on the forewing, the fringe paler pink. Hindwing whitish green, the fringe with a tinge of pink. Cape Town and vicinity. *sanguinipuncta.*

Rh. trimeni *Feld.* (2 i). Forewing yellow-green, hindwing whitish green. Cell-spot of forewing white, ringed successively with black and red-brown. Both wings with a blackish terminal line, accompanied proximally by narrow violet-white spots which — at least on the forewing — are separated from the ground-colour by a fine, sinuous brown line. Cape Town and vicinity. *trimeni.*

41. Genus: **Dichroma** *Westw.*

Similar in structure to *Rhadinomphax*, the forewing with the 3rd discocellular extremely deeply angled inward, the 1st radial well stalked, usually beyond the 2nd subcostal, the hindwing with costal margin still

longer than in *Rhadinomphax*. Antenna of ♂ very shortly pectinate. Only one species, which, except in shape, recalls the Palacarctic genus *Agglossochloris*.

equestralis. **D. equestralis** *Westw.* (= equestrinaria *Guen.*) (4 c). Unmistakable, with its yellow-green ground-colour and intricate silvery markings. Only known from the Cape.

42. Genus: **Argyrographa** *Prout.*

Palpus and antenna nearly as in *Comibaena*. Femora hairy. Hindleg rough-scaled, the tibia not dilated. Wings narrower than in *Comibaena*, forewing with 2nd subcostal anastomosing with 1st, hindwing with costal as in *Prosomphax*. Perhaps misplaced here, although its maculation has something in common with *Dichroma*.

moderata. **A. moderata** *Walk.* (= eximiata *Feld.*) (2 i). Small, less long-winged and much brighter green than *D. equestralis*, the white markings differently arranged. Cape.

43. Genus: **Leucaniodes** *Prout.*

♂ unknown. ♀ antenna strongly pectinated nearly to its apex. Palpus minute. Tongue wanting. Hindtibia with 4 spurs. Very distinct from all the other longwinged *Hemitheinae* in having the 1st and 2nd subcostals of the forewing long-stalked, the costal of the hindwing anastomosing very strongly with the cell. Only one species, evidently adapted to dry grasses.

periconia. **L. periconia** *Prout* (4 g). Forewing striking on account of its fine longitudinal striation, the veins and hind part of the cell being white, the rest striated with light-brown irroration. Hindwing white. Described from S.W. Africa. The Berlin Museum possesses also one ♀ from Tanganyika Territory.

44. Genus: **Conchyliodes** *gen. nov.*

Palpus minute. Tongue obsolete. Antenna in ♂ short, pectinate to the apex. Pectus, femora and foretibia somewhat hairy. Hindtibia with terminal spurs only. Abdomen robust; not crested. Forewing rather narrow; termen curved, extremely oblique; 1st subcostal well free, 2nd, 5th, 3rd and 4th fairly long-stalked, 1st median from near end of cell. Hindwing with humeral area expanded, the angle sharp, frenulum well developed, from scarcely before the angle; costa rather elongate; costal anastomosing with subcostal at middle 3rd of cell or rather more, 2nd subcostal shortly stalked, 1st median separate. Type of the genus: *C. distelitis sp. n.* An anomalous genus, perhaps related to *Leucaniodes*, but with 2nd subcostal of forewing normal, anastomosis of costal of hindwing less extreme and without the proximal spurs of the hindtibia.

distelitis. **C. distelitis** *sp. n.* (4 c). Face red-brown. Crown of head white. Body predominantly white, wing-tegula heavily marked with brown. Wings glossy white, almost as in a *Conchylia*; forewing with broad subcostal and hindmarginal streaks claret-brown, in part dark-mixed; a similar, but much narrower shade at distal margin, suffusing the fringe. Hindwing with a spot of the same colour at anal angle. Forewing beneath suffused with purple-brown; hindmargin broadly and distal margin narrowly white. Hindwing beneath impure white, with a purple subterminal line, thick anteriorly, faint posteriorly, nearly parallel with distal margin. Bulawayo, 28 February 1924 (R. Stevenson), type in the Transvaal Museum. S.W. Africa: Okahandja, 2—18 March 1928 (R. E. Turner), a more weakly marked ♂ in the British Museum.

45. Genus: **Paraprasina** *Warr.*

This genus was erected by Warren for a single species, of relatively large size and of robust build, especially in the ♀. Pectus densely hairy. Palpus rough-scaled beneath, in ♂ rather short, in ♀ with elongate terminal joint. Tongue wanting. Antenna pectinate, in the ♀ only very shortly. Hindtibia with terminal spurs only. No doubt a development of *Microloxia*.

discolor. **P. discolor** *Warr.* (4 d). Uniform green, with white strigulation and white costa, the ♂ resembling a robust *Prasinocyma*, the ♀ much larger, sometimes extremely large, and with a very stout abdomen. Distributed from the Cape to S. Rhodesia, but not common.

46. Genus: **Microloxia** *Warr.*

Small but relatively robust moths, distinguished from *Paraprasina* by the presence of the tongue and, in the typical group, the nonpectinate ♀ antenna. The wings not strigulated with white, the lines usually present. The genus is predominantly Mediterranean, but has spread to South Africa and Continental Asia.

M. ruficornis *Warr.* (4 d) is the African representative of *herbaria Hb.* (Europe) and *indecretata Walk.* (India), perhaps in general rather less small than the latter and rather less dark green than the former, but it is very likely that all three constitute a single species. *ruficornis* was described from Natal, but is common from the Cape to Kenya Colony, perhaps also in the Sudan. — **innotata** *Warr.*, from Benguella, appears to be merely a weakly marked aberration of *ruficornis*, in poor condition. *ruficornis.* *innotata.*

47. Genus: **Rhodesia** *Warr.*

Palpus in the ♂ moderate, in the ♀ with the 3rd joint long. Antenna in the ♂ strongly pectinate. Hindtibia with all spurs. Abdomen not crested. Hindwing rounded, the costal vein anastomosing with the subcostal to at least the middle of the cell. Three species, all African.

A. Antenna of ♀ not pectinate.

Rh. depompata *Prout* (4 d) differs from the others in the uniform green wings, only the extreme margins showing the white and purplish colours which develop in them. Abdomen white, irrorated above with brown and vinaceous. Transvaal. *depompata.*

Rh. viridalbata *Warr.* Structure about as in *depompata*. Both wings with small white cell-dot, dentate postmedian line, arising from a white costal spot, and white patches smaller than in typical *alboviridata* (5 e), the proximal ones not reaching the border. Natal, rare. *viridalbata.*

B. Antenna of ♀ pectinate.

Rh. alboviridata *Saalm.* (5 e). Apart from the antennal difference, readily distinguishable by its small size and by the very long ♀ palpus. First known from Madagascar, but proves very widely distributed: Senegal to Angola, E. Africa, Nyasa and Rhodesia, very variable in the extent of the markings. *alboviridata.*

48. Genus: **Lasiochlora** *Warr.*

Larger and more strongly built moths than *Rhodesia*, more irregularly shaped, the palpus short. Antenna in both sexes strongly pectinate. Hindtibia with all spurs. Hindwing with costal vein anastomosing as in *Rhodesia* or sometimes (*bicolor*) still more strongly, 1st median of both wings arising much before end of cell. The two species are dissimilar in shape and markings, probably not very closely related.

L. diducta *Walk.* (= lunigera *Feld.*) (2 h). Abdomen crested. Termen of hindwing somewhat crenulate and with a tooth at 3rd radial. A very characteristic spot on forewing at the end of the punctiform postmedian, much reduced, however, in the ♂. Cape (type) and Natal. *diducta.*

L. bicolor *Th.-Mieg* (2 k, 4 d). Unique in its deep flesh-pink hindwing and underside, the latter becoming whitish posteriorly. Termen of hindwing faintly sinuous, but not crenulate. Natal and Delagoa Bay. — **maculosa** *Prout*, from Kenya Colony, has the postmedian of the forewing rather more obliquely placed, the dots enlarged into spots on the radial and median veins, largest on the 3rd radial and 1st median. On both wings the 1st and 2nd radials are less approximated than in *bicolor*. Perhaps a distinct species. *bicolor.* *maculosa.*

49. Genus: **Syndromodes** *Warr.*

In size, shape and build more like *Rhodesia* than like *Lasiochlora*. Palpus in both sexes short. Tongue slight. Antenna pectinate in the ♂ only. Hindwing with costal vein anastomosing strongly. All the known species are bright green, without red or brown markings, and recall the Palaearctic *Hierochthonia*, from which they differ in having all the spurs of the hindtibia fully developed. Exclusively South African.

S. invenusta *Wllgrn.* (= unicolor *Warr.*) (4 d). Distinguished by its red face and wholly white fringes. Cell-dots and vein-dots representing a postmedian line very small or obsolescent. "Caffraria" (Wallengren); known to me from Natal and the Cape and perhaps S. Rhodesia. *invenusta.*

S. prasinops *sp. n.* (4 d). Expanse 25 mm. Face and palpus green. Thorax and abdomen above broadly green, beneath mostly white. Wings perhaps between "malachite-green" and "rajane-green" of Ridgway, costal edge of forewing whitish; fringes white, purest at base. Underside rather paler, especially on hindwing posteriorly. Transvaal: Wylies Poort, 9 November 1920 (C. J. Swierstra), type in Mus. Transvaal. Also from Bulawayo, etc. Hitherto confused with *unicolor Warr.* (which is provisionally sunk to *invenusta Wllgrn.*), scarcely differing except in its green face and broadly green abdomen above; antenna of ♀ less dentate. *prasinops*

S. cellulata *Warr.* (4, d, e). Slightly more bluish green than *invenusta*, cell-dots often larger, postmedian line continuous, though often weak, fringe green in proximal half. Face bright red. Natal and Orange Free State to S. Rhodesia, the type from the Transvaal. *cellulata.*

dimensa. **S. dimensa** *Walk.* Considerably larger (29 or 30 mm), rather longer-winged, costal vein of hindwing anastomosing only to about the middle of the cell. The faint postmedian line is not, as in *cellulata*, parallel with the termen throughout but is lunulate inward at the fold. Cape.

oedocnemis. **S. oedocnemis** *Prout* (5 c). Similar to *cellulata*, but with the costal vein of the hindwing more as in *dimensa*, the fringes nearly as white as in *invenusta*. The face is of a very indefinite colour, dull red partly overlaid with green scales. Lines rather better developed than in most *Syndromodes*. The ♂ is structurally distinct from all the others in having the hindtibia swollen almost as in *Hemidromodes*. S. Rhodesia.

50. Genus: **Hemidromodes** *Prout.*

Palpus in ♂ shortish, in ♀ moderate. Tongue wanting. Antenna short and stout, with moderate pectinations in the ♂ and very short and slender ones in the ♀. Hindtibia of the ♂ strongly swollen, with the proximal spurs well developed, the terminal ones very short; in the ♀ with the proximal spurs short, sometimes wanting. Abdomen of ♀ robust. Venation nearly as in *Syndromodes*, the costal vein of the hindwing anastomosing to scarcely one-half the cell-length. Two closely related species, both from the semi-desert countries which separate the Aethiopian from the Palaearctic Region. I have described a third from India.

robusta. **H. robusta** *Prout* (4 e). Plain green, with only the faintest possible suggestion of paler lines. Face light orange-reddish. Egyptian and French Sudan and British Somaliland; the type from Port Sudan.

affinis. **H. affinis** *Rothsch.* (4 e) only differs in having rather broad and conspicuous pale lines and is perhaps a race. Sahara: Hoggar Mountains. Also from Aswan, Egypt.

51. Genus: **Hierochthonia** *Prout.*

Differs from *Hemidromodes* in that both sexes have only a single pair of spurs on the hindtibia. See further Vol. 4, p. 27. In addition to the three Palaearctic species there described, I have provisionally referred to the genus one African one, of which the ♂ is unfortunately still unknown, and now add a second.

featheri. **H. featheri** *Prout* (5 c). Broader and rather larger than the species of the preceding genus. Face green. Somaliland.

migrata. **H. migrata** *sp. n.* (4 e). ♂, 23 mm. Face and palpus deep red. Vertex and antennal shaft white. Thorax and abdomen green, paler beneath. Rather more robust than typical *Hierochthonia*, apex of forewing rather less sharp. Green, with fine whitish irroration recalling *Prasinocyma*, unmarked excepting very faint indications of darker cell-dots. Underside rather paler. ♀ Voï, Kenya, 600 m, 2—8 March 1912 (Ch. Alluaud and R. Jeannel), type in Mus. Paris. Also from Kibwezi, Kenya and from Neu-Moschi, Kilimandjaro, 800 m.

52. Genus: **Xanthodura** *Btlr.*

Eye rather small. Palpus of ♂ shortish, with minute terminal joint. Tongue present. Antenna of ♂ moderately pectinated. Hindlegs lost in the unique type. Abdomen short, without crests. Forewing with all the subcostals stalked, the 1st anastomosing with the costal, 2nd radial from very near 1st, 1st median not stalked. Hindwing with distal margin weakly sinuate between the radials, abdominal margin long; costal anastomosing at a point with subcostal, 2nd subcostal very shortly stalked with 1st radial, 2nd radial from close to 1st, 1st median connate with 1st radial. Affinities quite uncertain.

trucidata. **X. trucidata** *Btlr.* (2 k). Bright orange; forewing with black-brown apical patch, in its posterior part with some red shading proximally; hindwing with a much less extended apical patch, predominantly red above, black-brown beneath. Madagascar.

hypocrypta. **X.** (?) **hypocrypta** *Prout* (5 c) can scarcely be congeneric with the preceding, but its position is equally doubtful. Considerably smaller, more slenderly built, different in shape and maculation and with the 1st subcostal of the forewing arising from the cell, anastomosing with the 2nd, as well as with the costal. Forewing beneath with a dull purple apical patch, at costa 4 mm wide. Madagascar.

53. Genus: **Cacochloris** *Prout.*

From here on to the end of the *Hemitheinae*, all the genera are without frenulum in either sex. *Cacochloris* was erected for two sand-coloured species of rather robust build, with short tongue, strongly pectinated

antenna in both sexes, all spurs present, abdomen not crested. In the genotype, which is Indian, the 1st and 2nd subcostals of the forewing are coincident, but in the African species they are merely stalked together.

C. ochrea *Warr.* (2 k, 4 e). Larger and rather paler than the Indian, *uvidula Swinh.* with the post- *ochrea.*
median line of both wings sinuous. Widely distributed, but always taken sparingly, the type from Dar-es-Salaam. I have it before me from Senegal, French Guinea, Ivory Coast, Nigeria, S. Sudan, Uganda and Kenya Colony.

54. Genus: **Euchloris** *Hbn.*

To this Palaearctic genus, which differs from *Comibaena* in the absence of the frenulum, must be referred one small African species, though it has probably evolved independently, perhaps from the Indian *inductaria*-group of *Comibaena*. See further Vol. 4, p. 27.

E. undulilinea *Warr.* (4 e). Easy to recognize by its highly sinuous, in places thickened, whitish lines, *undulilinea.*
white terminal dots and reddish fringes. Described from Sierra Leone, but occurring singly as far as Principe, Gaboon, the Upper Congo and even in Nyasaland.

55. Genus: **Mictoschema** *Prout.*

Palpus moderate. Tongue undeveloped. Antenna rather short, in the ♂ pectinate. Thorax posteriorly and abdomen crested. Hindtibia with 4 approximated spurs. Wings densely scaled. Forewing with 1st subcostal arising from the cell, 1st radial stalked with the subcostals. Hindwing with abdominal margin elongate; costal anastomosing at a point with subcostal, 2nd subcostal not stalked, 1st median shortly stalked. An interesting genus, probably derived from *Mimandria* by the loss of the frenulum.

M. swierstrai *Prout* (5 d). Face black. Wingmarkings easily recognizable from our figure. ♀ considerably *swierstrai.*
larger (41 mm). Transvaal. — **tuckeri** *Prout*, from Otjituo, S.W. Africa, has the distal margins slightly more *tuckeri.*
rounded, the coloration more variegated, the median and terminal areas being blackish, the intermediate part conspicuously mixed with light brown. Possibly a separate species.

56. Genus: **Holoterpna** *Püng.*

A rather incongruous Palaearctic genus (see Vol. 4, p. 29) which has been extended to contain temporarily an anomalous African species. Differs from *Mictoschema* in the 2-spurred hindtibia, non-crested abdomen, etc. The Palaearctic species have the forewing dull green, markings quite weak.

H. errata *Prout* (4 f). Smaller and rather paler grey than *M. swierstrai*, with differently shaped *errata.*
postmedian. Rhodesia: Sawmills. Also a somewhat worn ♂ from S.W. Africa in coll. Joicey. — **segnis** *form.* *segnis.*
n. (? *sp. n.*) is rather broader-winged, paler grey, more uniform, without dark subterminal shading, the lines generally less approximated. Bulawayo. Type in coll. Transvaal Mus. The antenna of the ♀ in this species is pectinate and the 2nd subcostal is irregular, sometimes wanting, sometimes stalked with the 1st.

57. Genus: **Gonochlora** *Swinh.*

Palpus in ♂ rather short (♀ unknown). Antenna short, thick, with strong clavate teeth. Hindtibia slender, with terminal spurs only. Abdomen not appreciably crested. Both wings with distal margin strongly projecting in the middle; forewing sinuate in front of the projection and with all the subcostals stalked, one wanting. One species.

G. minutaria *Swinh.* (4 f). Except in its remarkable shape, this species might be compared with *minutaria.*
Doloma leucocephala (4 f), having similarly faint lines, dark reddish terminal line and snow-white fringes. Cell-dots rarely sharp. Sierra Leone (type), Ivory Coast and Cameroons.

58. Genus: **Dolosis** *Prout.*

Superficially similar to the Palaearctic *Thalera* (Vol. 4, p. 30), but with minute palpus, rudimentary tongue, longer ♀ pectinations, all the hindtibial spurs present and other smaller differences. Only one species known.

D. illacerata *Prout* (4 e). Strongly recalls *Thalera lacerataria Graes.* but with only the hindwing *illacerata.*
excavated in front of the 3rd radial. Vivid green, with large cell-dots and punctiform lines. Natal.

59. Genus: **Doloma** *Prout.*

Palpus moderate, in the unknown ♀ probably with the 3rd joint elongate. Tongue present. Antenna of ♂ pectinate. Hindtibia with four spurs. Forewing with distal margin more curved than in *Thalera*, hindwing less excavated anteriorly than in that genus, the angle at 3rd radial more produced. Again only one species.

leucocephala. **D. leucocephala** *Prout* (4 f). Resembles a small pale *Perithalera oblongula Prout*, which, however, possesses a frenulum and has a rather broader, less produced hindwing, a brown dorsal patch on the abdomen, etc. N. Madagascar: Diego Suarez.

60. Genus: **Nothoterpna** *Warr.*

Rather robust and roughly scaled. with nearly the texture and coloration of *Holoterpna* (vera). Different thereform in the very short palpus, 4-spurred hindtibia, pectinated ♀ antenna and wider separation of the 3rd radial from the 1st median. Two species known, both African.

crassisquama. **N. crassisquama** *Warr.* (4 f) is the larger species, with costal margin of both wings relatively longer, postmedian line of forewing more oblique, hindwing whitish, becoming slightly greener distally. Angola.

pallida. **N. pallida** *Warr.* (4 f). Hindwing scarcely paler than forewing, with a discernible, though indistinct, postmedian line curved nearly parallel with distal margin. The postmedian of the forewing is less oblique than in *crassisquama*, and this wing generally shows in addition a faint, curved antemedian. Cell-dots sometimes larger. Angola, N. Rhodesia and Nyasa.

61. Genus: **Chlorosterrha** *Prout.*

Perhaps a section of the preceding, typically very different in its small size, narrow wings and smoother scaling, but connected through *semialba Swinh.*, which we place here because the two genera have been differentiated hitherto by the position of the origin of the 2nd radial of both wings: close to 1st radial in *Nothoterpna*, well removed in *Chlorosterrha*. Exclusively African.

semialba. **C. semialba** *Swinh.* (2 g). Similar in shape to *N. crassisquama*. Rather smaller, less roughscaled, forewing brighter and more bluish green, hindwing clearer white. Angola (type) to Lake Tanganyika and Uhehe.

monochroma. **C. monochroma** *Prout* (4 f) is one of the numerous plain, rather bright green South African *Hemitheinae* but is distinguishable from *Prasinocyma*, *Chlorocoma*, etc., by the absence of the ♂ frenulum and by the paler (anteriorly almost white) hindwing. ♂ type rather narrower-winged than the figured ♀, hindwing greener. Orange Free State and the Cape.

dichroma. **C. dichroma** *Feld.* (= albaniensis *Prout*) (2 k, 4 g). Much smaller than *semialba*, narrower-winged, more glossy, the white stripe of forewing more strongly developed. Cape of Good Hope.

62. Genus: **Acollesis** *Warr.*

Most characters as in *Nothoterpna*. Palpus about as long as diameter of eye. Wings not quite so robust as in *Nothoterpna*; forewing with all 5 subcostals stalked, the first (except sometimes in *mimetica*) anastomosing with the costal, 1st radial generally shortly stalked with them. All the species are African and are closely related.

fraudulenta. **A. fraudulenta** *Warr.* (4 g), the type of the genus and the commonest species, is of a delicate light blue-green when fresh, but easily fades to a dirty whitish. Face red. Lines white, not very sharp. Transvaal (loc. typ.) and Natal, rarer in Cape Colony.

oxychora. **A. oxychora** *sp. n.* ♂, 34 mm. Face pale green. Both wings with 3rd discocellular from cell-spot outward excessively oblique, recalling the Indo-Australian genus *Oxychora*. Water-green; cell-dots large; forewing with a moderate white postmedian line from $^5/_8$ hindmargin, straight and slightly more oblique than termen about to 2nd radial, then curving slightly more in the direction of the apex, becoming gradually narrower and weaker; hindwing with postmedian fairly broad, straightish. Marungu Plateau, S.W. of Lake Tanganyika, 7000 feet, February 1922 (T. A. Barns). Type in coll. Joicey. Distinguished from *umbrata* by the more extreme discocellulars and the postmedian line.

umbrata. **A. umbrata** *Warr.* (4 g) differs from *fraudulenta* in its pale face, more oblique postmedian and in the presence of small brown or blackish cell-dots. Described from Unyoro, but extending to S. Sudan, Nyasaland, Rhodesia, N.E. Congo and Angola.

A. densisquamata *Prout* was first considered a race of *umbrata* but is probably a species, somewhat greyer green and with the coarse scaling of *Nothoterpna*, the cell-dot somewhat enlarged, the face more tinged with red. Bihe, Angola; E. Luvua Valley, N.E. of Lake Mweru (T. A. Barns). *densisquamata.*

A. terminata *Prout* (4 g). Face bright red, as in *fraudulenta*, wings more yellowish green, with darker fringes, the white postmedian line sharper, generally edged proximally with darker green, on the hindwing straighter, more proximally placed anteriorly. Apex of forewing rather sharp. Described from Zululand, known from Natal and Rhodesia. *terminata.*

A. mimetica *Prout*. Face pale green; distal margins and fringes concolorous with wings; otherwise very similar to *terminata*. Still more like *Collesis mimica* (2 g), from which it scarcely differs except in the venation; postmedian line on both wings rather more proximally placed than in typical *mimica*, on the forewing scarcely reaching the costa. Discovered on Mount Mlanje, Nyasa, by Mr. S. A. Neave; also known from Langenburg, north of the Lake. *mimetica.*

63. Genus: **Collesis** *Warr.*

Closely related to *Acollesis*. Distinguished by having the costal of the hindwing strongly anastomosed with the costal and the 2nd costal of the forewing stalked to considerably beyond the 5th. Type *mimica Warr.*

C. mimica *Warr.* (2 g, 4 h). Face green. Best distinguished from *A. mimetica* by the structure, as an aberration has the postmedian line almost as proximally placed, though rather more oblique. North Rhodesia (type) and distributed to Unyoro, Kenya Colony, South Rhodesia and Portuguese East Africa. *mimica.*

C. fleximargo *Warr.* (4 g) differs from *mimica*, not only in its deep-green colour and its shape but also in that the 1st subcostal of the forewing arises from the cell, whereas in *mimica* it is stalked as in *Acollesis*. Palpus minute. Probably not congeneric. Angola (type) and Nyasa. *fleximargo.*

64. Genus: **Syncollesis** *gen. nov.*

Palpus in both sexes short (at most one-fourth longer than diameter of eye). Tongue short. Antenna in the ♂ and sometimes in the ♀ pectinate. Hindtibia in ♂ not dilated, in both sexes with 4 spurs. Wings densely scaled, with smooth margins. Forewing moderately broad; 1st subcostal from the cell, anastomosing with costal, 2nd subcostal arising well before 5th, 1st radial not stalked. 2nd arising at least twice as near to 1st as to 3rd, 1st median well separate. Hindwing with costal anastomosing with subcostal to middle of cell or beyond, 2nd radial from about $^1/_3$ of discocellulars, 1st median well separate. Type of the genus *Syncollesis trilineata* (= "*Acollesis*" *trilineata Hmpsn.*, 1910). It seems impossible to retain this group in *Omphacodes* together with the long-palpus elements which have more in common with the type of that genus. A further constant, though slight, distinction is in the separation of the 1st radial vein of the forewing from the stalk of the subcostals. The species would be equally incongruous in *Collesis*, which is well characterized by its peculiar subcostal venation.

S. bellista *B.-Bak.* (4 l). Palpus extremely short. Antennal pectinations in the ♂ short, terminating in tufts of cilia. Face whitish, narrowly fuscous in upper part. Wings delicate bluish green, nearly as in *fleximargo* or somewhat less intense; the straight, oblique glaucous-whitish postmedian line of the forewing is edged proximally by a line of deeper but brighter (more yellowish) green. Angola: N'Dalla Tando, only the type known. *bellista.*

S. idia *sp. n.* (5 d). ♂ 28 mm, ♀ 34 mm. Face with more than the upper half fuscous. Antenna of ♂ with the branches ending in shorter cilia than in *bellista*, of ♀ not pectinate. Rather larger than *bellista*, broader-winged, brighter green, more irrorated with glistening white, the postmedian line whiter, not noticeably dark-edged proximally, scarcely more oblique than distal margin. Benguella: Batt, 29 November 1905, the type ♂; Fort Quilenges, 7 January 1905, the figured ♀; both in Mus. Tring, sent by Dr. Ansorge. Also from Nyasaland in the same collection. Formerly confounded with *bellista*. *idia.*

S. elegans *Prout* (4 h). Palpus slightly longer than diameter of eye. Antenna of ♀ not pectinate. Different from the other *Syncollesis* in its white hindwing. Kenya Colony. *elegans.*

S. coerulea *Warr.* Very similar to *trilineata Hmpsn.* (2 k) but with the postmedian line of the forewing rather thicker, more proximally placed and more oblique, continued straight across the middle of the hindwing, and with a white cell-spot on each wing, that of the hindwing distinct. Found around the northern shores of Lake Nyasa. — **zetetea** *form. n.* is of a less blue green, the white lines still stronger, notably the subterminal, the white cell-spot of the forewing also better developed. Madagascar, type ♂ in the Joicey collection, a second *coerulea.* *zetetea.*

♂ in the British Museum. As there is also a ♂ from Appan, Gold Coast in the last-named colleetion, much more similar to the Madagasear specimens than to the Nyasa type, this will perhaps prove a distinet speeies, but I can find no significant differenee, unless the build be a little more robust.

trilineata. **S. trilineata** *Hmpsn.* (2 k). Faee broad and rather prominent, bright red. Antenna in the ♀ strongly pectinate. The white lines slender, faintly denticulate, the postmedian of the hindwing more or less curved anteriorly and here more distally placed than the posterior end of that of the forewing. N.W. to S. Rhodesia, also known from Angola and Congo.

65. Genus: **Tropicollesis** *gen. nov.*

This genus is described in my unpublished manuscript of the *Geometridae* of the "Voyage de Ch. Alluaud et R. Jeannel". ♂ unknown. ♀ with most of the eharacters of *Syncollesis* but with the wings (especially the forewing) narrowed, the colouring not green, cell of forewing ½ wing-length, 1st median arising elose to 3rd radial, hindwing with 2nd radial scarcely before middle of discoeellular, 1st median stalked. Palpus scareely as long as diameter of eye, with very short terminal joint; tongue vestigial: antenna very shortly peetinate. Type of the genus, *T. albiceris sp. n.*

albiceris. **T. albiceris** *sp. n.* Expanse 21 mm. Scarcely paler than eream-buff. with some minute brown irroration; markings dusky brown, in places mixed with blackish. Forewing with a weak spot at base of costa; an elongate eell-spot; lines strongest at extremities, antemedian from ⅓ costa, dentate inward at median and submedian veins, outward behind; postmedian from ⅔ costa, dentate outward on veins, ineurved at both folds. Hindwing with distal margin rounded, but not quite regularly; a postmedian line, rather more strongly outbent at 3rd radial to 1st median than on forewing, otherwise similar. Underside slightly paler, the markings obsoleseent. Kenya Colony: Taveta, 750 m, 16—21 March 1912 (Alluaud & Jeannel). Type in Mus. Paris.

66. Genus: **Omphacodes** *Warr.*

Palpus moderate or long, with relatively elongate terminal joint. Hindtibia of ♂ eommonly dilated, with hair-pencil. 1st radial of forewing connate or stalked, very exeeptionally (so far as I know only in some *divergens*) just separate, 1st median of hindwing generally, of forewing occasionally stalked. Otherwise with the charaeters of *Syncollesis*, though the colouring is generally of a less bluish green. Even after the elimination of that genus, *Omphacodes* is diversified, containing 3 sections. The first, which contains the Indian genotype, *directa Walk.*, comes nearest to *Syncollesis*.

A. Palpus in ♀ moderate. ♀ antenna pectinate. ♂ hindtibia dilated. 1st median of hindwing not always stalked.

divergens. **O. divergens** *Warr.* Seheme of pattern nearly as in *S. trilineata* (2 k). Generally smaller, but variable in size; forewing relatively shorter; colouring less blue. Unyoro (type), Kivu, Kenya, Sudan and Senegal.

B. Palpus in ♀ moderate to long. ♀ antenna simple. ♂ hindtibia not dilated. Apex of forewing acute. 1st median of hindwing stalked.

purifimbria. **O. purifimbria** *sp. n.* (4 h). Expanse 23 mm. Face red. Palpus shorter than in the two following, even in the ♀ only about 1½ times the diameter of the eye. ♂ with moderately long, slender pectinations; ♀ antenna serrate. Postmedian line indicated by white vein-dots, accompanied proximally by some brown ones which are weak or obsolete in the ♀♀; subterminal line generally traceable; fringe ereamy white. S.W. of Tanganyika: Marungu Plateau, W. side, 7000 feet, February 1922 (T. A. Barns), 2 pairs in the Joicey colleetion.

pulchritacta. **O. pulchritacta** *Prout.* Only the ♀ known. In this the palpus is a little longer than in *purifimbria* but not so long as in *pulchrifimbria.* Larger than *purifimbria*, 28 mm; face more brown than red; forewing with a short, inwardly oblique rosy streak from 1st median to near fold; hindwing with a corresponding dot or short dash on 1st median; fringes white. Central Abyssinia: Moraqui.

pulchrifimbria. **O. pulchrifimbria** *Warr.* (4 h) is readily distinguished by the long palpus of the ♀ and the rosy tips of the fringes. Kenya Colony (type), S.E. Sudan and Eritrea.

C. Palpus still longer. ♀ antenna more or less dentate. ♂ hindtibia dilated. 1st median of hindwings talked.

vivida. **O. vivida** *Warr.* (4 h). Similar in size, shape and colour to *Syndromodes invenusta Wllgrn.* and with a similar distribution, but easily distinguished in both sexes by the much longer palpus, green fringes and other characters. Fresh specimens show white, red-edged spots on the abdomen, but the body in this and the two following speeies seems very liable to "grease". The type was from Natal.

O. delicata *Warr.* differs chiefly from *vivida* in having a slender dark terminal line, interrupted at the vein-ends by large white dots, the fringe whitish, with rather large grey spots opposite the vein-ends. The face is perhaps less red and the ♀ palpus a trifle longer still. Natal (type), S. Mozambique and Kenya Colony. *delicata.*

O. punctilineata *Warr.* (4 h) scarcely differs constantly from *delicata* except in having the white dots which represent the two lines (or at least the postmedian) accompanied by larger dark dots. Terminal line and dots generally slighter, the spots on the fringe connected by a reddish line. Perhaps both are forms of one species, *punctilineata* commonest in the ♂, *delicata* in the ♀. Cape to S. Rhodesia. *punctilineata.*

O. minima *Prout.* Smaller than the other species (16 mm); probably nearest to *delicata*. Rather bluer green, terminal white vein-dots present, but no dark line; fringe similarly spotted. Abdominal white spots not red-edged. Nigeria. *minima.*

67. Genus: **Hemistola** *Warr.*

Palpus variable in length, generally quite short. Antenna pectinate in the ♂ and usually in the ♀. Thorax beneath hairy. Abdomen not crested. Hindtibia with all spurs, rarely with hair-pencil. Wings ample, densely scaled, the hindwing typically with a blunt or a sharp angle at the 3rd radial. Venation normal, the costal of the hindwing not anastomosing with the cell. A rather heterogeneous assemblage of Old-World species (see Vol. 4, p. 30).

H. (?) **ereuthopeza** *Prout* (4 i). Palpus short and slender. Tongue rudimentary. Antenna in ♀ pectinate. Narrower winged than true *Hemistola*, probably related to *Eucrostes rufociliaria H.-Sch.* but with 4-spurred hindtibia. Forewing nearly as in that species, hindwing whitish. ♂ unknown. Orange Free State. *ereuthopeza.*

H. (?) **incommoda** *Prout* (4 i). Wings broader than in *ereuthopeza*. Tongue developed. Otherwise nearly akin to that species. The hindwing, proximally whitish and distally more green in fresh specimens, discolours through moisture to a rather bright ochreous. Described from Transkei (Cape Colony), subsequently obtained by Prof. Janse from Rietviel, Natal. *incommoda.*

H. hypnopoea *Prout* (4 h) differs from all the other *Hemistola* in its dull, pale yellow-green colour, which recalls *Nothoterpna* or *Acollesis*. Palpus slender, a little longer than diameter of eye. Antenna in ♂ with the pectinations short, in ♀ not pectinate. Hindtibia in ♂ with a hair-pencil. Madagascar. *hypnopoea.*

H. albifimbria *Warr.* (4 i), founded on a ♀ from Nyasaland, was described as a *Thalassodes* and transferred, according to the discocellulars of the hindwing, to *Prasinocyma*, but proves to have no frenulum in the ♂ and is probably a *Hemistola* with non-pectinate ♀ antenna. It is of a lighter, more yellowish green than the similar species of *Prasinocyma*. Very widely distributed: E. Africa, Uganda, N.E. Congo, Nigeria, Senegal. *albifimbria.*

H. tricolorifrons *Prout* recalls a still broader winged *Prasinocyma ampla* except in the minute palpus and absence of ♂ frenulum. Face red above, strongly mixed with green in middle, white below. Wings thinly scaled, strigulated as in *Prasinocyma*, without markings; hindwing rounded. Mount Kenya, W. slopes (type) and Lamu Island. *tricolorifrons.*

68. Genus: **Lophostola** *Prout*

A very natural genus, showing the rare combination of strongly developed abdominal crests with loss of frenulum in both sexes. Palpus in ♂ shortish, in ♀ longer. Antenna in both sexes simple. Hindtibia in both sexes with terminal spurs only. Forewing with all the subcostals on a common stalk. Exclusively African.

L. atridisca *Warr.* differs from the other species in having the hindwing less bent. Cell-spots black-brown; terminal line obsolete; fringe unspotted. Natal; also from Pondoland, Transvaal and S. Mozambique. — **cumatilis** *Prout* (4 l) from Madagascar, is of a bluer green, the cell-spots larger, white vein-dots better developed, terminal white dots also present on the veins. — **dummeri** *subsp. n.* expands 29 mm, is brighter green and has the cell-spots at least as small as in *atridisca*, but of a reddish colour, and the hindwing begins to make some approach in shape to that of *cara*, which may possibly prove a further race of the same species. Uganda: Mulange, Jinja, May 1922 (R. A. Dummer), type ♂ in Mus. Tring. A ♂ from Nairobi in coll. Joicey. *atridisca.* *cumatilis.* *dummeri.*

L. cara *Prout* has nearly the shape of *annuligera* (4 l) but is smaller, a little brighter green, cell-spots red, scarcely pale-centred, terminal line weaker, fringe more yellowish, with its spots redder, costal margin of forewing not dark-spotted. Nigeria (type), Ivory Coast and W. Kivu. The less small size and plain green fringe differentiate all the races of *atridisca* from it. *cara.*

L. annuligera *Swinh.* (4 l). Readily recognized by its conspicuous dark terminal line and whitish, dark-spotted fringes; costal margin of forewing with dark strigulae. Uganda. Also known from French Guinea, Gold Coast, Ashanti, Nigeria, Cameroons and possibly Nyasa. *annuligera.*

69. Genus: **Berta** *Walk.*

An Indo-Australian genus, or perhaps section of the well-known *Iodis Hbn.*, distinguished by the form of its discocellulars, the 2nd being incurved and becoming oblique outward, so that the 3rd (at the base of the 2nd radial) arises more distally. In the typical group the hindwing shows an excision between the 1st radial and the tail at the angle of the 3rd. The single African species is probably not congeneric, as it lacks this excision and has the antenna of the ♀ strongly pectinate.

persimilis. **B. persimilis** *Warr.* (4 l). Palpus of ♀ with terminal joint extremely long and slender. The pair of cell-dots on each wing, that of the hindwing sometimes connected by a V-shaped mark, is characteristic. Nigeria (type), Ivory Coast, Cameroons and about Lake Kivu, not variable.

70. Genus: **Ctenoberta** *Prout*

Differs from *Berta* in that the palpus is less long, the antenna of the ♂ pectinate nearly to the apex, that of the ♀ also strongly pectinate, forewing with base of 1st subcostal either obsolete or arising well down the stalk of the other subcostals, anastomosing with the costal and with the 2nd subcostal, the discocellulars only slightly indicating the *Berta* form, the hindwing neither emarginate between the radials nor strongly tailed at the 3rd radial. Only one species.

abanga. **C. abanga** *Prout* (4 i). Coloration and markings rather similar to those of the Indo-Australian *Berta* species. Apparently not variable. Gaboon (type), Cameroons and Congo.

71. Genus **Lambornia** *Prout*

Perhaps a near relative of *Ctenoberta*. Not essentially different in palpus, antenna or general coloration, but with only one pair of spurs on the hindtibia, the 1st subcostal of the forewing arising from the cell (its anastomoses as in *Ctenoberta*), the hindwing emarginate between the radials. Only one species.

inspiciens. **L. inspiciens** *Prout* (4 i). Recognizable by its shape and structural characters. Uganda (type), Cameroons and S. Nigeria.

72. Genus: **Hypsometra** *Auriv.*

A very distinct genus, though probably not so remote from *Comostolopsis* in structure as in facies. In its high mountain habitat it has apparently developed the diurnal habit and has almost entirely lost its green coloration, while the small eye, hairy palpus and strongly hairy peetus are also special adaptations. Palpus with 3rd joint elongate. Tongue present. Antenna in ♂ strongly pectinate, in ♀ serrate beneath. Hindtibia with all spurs. Forewing with all the subcostals stalked, the 1st running into the costal; both wings with 2nd radial arising little before the middle of the discocellulars, 1st median stalked with 3rd radial. Aurivillius gave an excellent account of this genus, but erroneously referred it to the *Acidaliinae* (*Sterrhinae*).

cricinellae. **H. ericinellae** *Auriv.* (4 f). Quite unlike any other known species. The name-typical form is whitish, with fuscous markings. — ab. *viridis ab. n.* has a pronounced greenish suffusion. Kilimandjaro: Kiboscho, at 3000—4000 m, common among Ericinella, discovered by Dr. Sjöstedt; a few subsequently taken by Alluaud and Jeannel at 2700—2800 m on Bismarckhügel, including the type of ab. *viridis* in the Paris Museum.

73. Genus: **Comostolopsis** *Warr.*

Palpus very slender, elongate, especially in the ♀. Tongue developed. Antenna with long pectinations in the ♂, sometimes also in the ♀. Hindtibia not dilated, all spurs present. Wings smooth-margined, bright green, commonly with reddish spots; venation nearly as in *Hypsometra* but with the 1st subcostal anastomosing with (not running into) the costal. African and Indian, probably a mere subgenus of the Indo-Australian *Comostola*, without the *Berta* form of discocellulars.

stillata. **C. stillata** *Feld.* (= rufostellata *Mab.*, mirabiliaria *Oberth.*) (2 k). Known by its bluish colour, strongly developed and pale-ringed reddish spots and contrasted terminal line and fringe. Very widely distributed in *phylarcha.* Africa, with São Thomé, Madagascar and the Aldabra Islands; Felder's type was from the Cape. — **phylarcha** *Prout* is a form with all the markings enlarged, especially the red terminal line. Ivory and Gold Coasts.

rubristicta. **C. rubristicta** *Warr.* (4 l) formerly regarded as an aberration of *stillata*, seems probably a good species, smaller, rather narrow-winged, with cell-spot of hindwing small, terminal line wanting. Uganda.

C. rufocellata *Mab.*, described as a *Eucrostes*, is darker, but also of a very blue green, and is distinguished by the large blackish, white-centred and red-ringed cell-spot of the hindwing. Madagascar. *rufocellata.*

C. subsimplex *Prout* (4 k). Yellower green than *stillata*, the red spots which accompany the lines absent or very slight, in any case not ringed with white. Madagascar (type) and Kikuyu Escarpment. — **intensa** *Prout* (4 i) is a rather deeply coloured form from the Comoros, with the cell-dots small and no trace of red dots accompanying the lines. *subsimplex.* *intensa.*

C. simplex *Warr.* (4 i). Generally larger, still brighter green and without the red terminal line. Kikuyu Escarpment and (?) Mount Mlanje, Nyasaland. *simplex.*

C. fluorita *Prout* (2 i). At least as large as *simplex* probably nearly related thereto. Cell-dot of forewing dark-green, at most with only a slight admixture of black scales, that of the hindwing a little less weak; the white lines not broken into spots or dots, but formed of rather deep lunules. São Thomé. *fluorita.*

C. sladeni *Prout* (= laesaria *Fryer*, nec *Walk.*). Smaller than *simplex*. Pectinations coarser, deeper reddish. Forewing with apex less pointed, costal edge redder, postmedian line almost obsolete, but with the red dot which accompanies it between the 3rd radial and 1st median larger and brighter, on the hindwing sometimes an additional (but minute) red dot at the 1st radial. Seychelles. *sladeni.*

C. germana *Prout.* Smaller than *simplex* (14—18 mm), palpus less long, costal margin of forewing white or whitish, white lines rather less slender than in the allies, the reddish spots which accompany them pale or obsolete, no fuscous cell-dots, the fringes green (in *simplex* yellow). Natal (type) and Cape Colony. *germana.*

C. apicata *Warr.* (= fuscipuncta *Warr.*) differs from the rest of the genus in having the ♀ antenna pectinate, with long branches. Otherwise extremely similar to *simplex*, but with rather stronger white lines and with a reddish spot at the apex and vestiges of a reddish line on each side of this. Natal and the Cape. *apicata.*

C. capensis *Warr.* comes between *simplex* and *germana* in size but is entirely different in colour, being the darkest blue-green *Comostolopsis* (unless perhaps *rufocellata*), with red face, ochreous costal edge and almost markingless wings, only a wavy postmedian line being faintly traceable. Cape (type) and Natal. *capensis.*

C. coerulea *Warr.* (4 i). Rather smaller and narrower-winged than *simplex* and of a pale blue instead of apple-green colour. Fringes light cream-buff (in *capensis* green). Kenya Colony. *coerulea.*

C. leuconeura *sp. n.* 23 mm. Dark bluish glaucous (not so blue as in *coerulea*), the face dark, the abdomen beneath whitish. Forewing at apex and hindwing at tornus rather acute; veins finely white; cell-dot minute, black; postmedian line dentate, inbent at fold. Reunion, 25 April 1922 (G. F. Leigh), type ♀ in Mus. Tring. *leuconeura.*

74. Genus: **Mixocera** *Warr.*

Palpus short. Tongue slight. Antenna variable. Hindtibia with terminal spurs only. Wings smoothly scaled; distal margins smooth; forewing with 1st subcostal arising near the end of the cell or shortly stalked, sometimes running into the costal, hindwing with costal touching the cell near the base only, both wings with the 1st median shortly stalked with, or arising close to, the 3rd radial. A small group of African and Indo-Australian moths, of very uniform facies, the forewing of a delicate pale blue-green (extremely liable to fade), with one or two nearly straight white lines, the hindwing concolorous or whiter, sometimes wholly white. The only pectinate species is Australian.

A. Antenna of ♂ simply ciliated (*Thelycera Prout*).

M. xanthostephana *Prout* (4 k). Generally larger than the other species, particularly in the ♀. The single white line of the forewing is variable in position but always oblique, generally slender. Hindwing white. Possibly a form of the following. Transvaal (type), Natal, Rhodesia, Uganda and Kenya. *xanthostephana.*

M. hemithales *Prout* has the white line of the forewing broader and less oblique, the ground-colour perhaps paler. Kenya Colony, the type from Fort Hall, at an altitude of about 4000 feet; ? Uganda. *hemithales.*

M. obliqua *B.-Bakr.*, founded on a single ♂ from N'Dalla Tando, Angola, has the antennal ciliation perhaps a little longer than in *viridans* and is of a somewhat more greyish green, with the postmedian line rather more oblique, on the forewing tapering anteriorly, on the hindwing rather broad, more proximal than in *viridans*; antemedian of forewing present, but extremely fine. *obliqua.*

M. viridans *Prout* (4 k) differs from the first two species chiefly in its green hindwing, with the line of the forewing continued; from section B in the ♂ antennal structure and generally in the slenderer postmedian line and obsolete antemedian. S. Rhodesia (type) and throughout a great part of Africa, reaching Gambia in the west and Natal in the south. Possibly this, and not *Chlorissa attenuata*, as hitherto determined, may have been the "*Iodis reductata*" of Walker, of which the type is lost. *viridans.*

B. Antenna of ♂ dentate or subpectinate (*Mixocera Warr.*).

albistrigata. **M. albistrigata** *Pagenst.* (= albimargo *Warr.*) (4 k). Forewing with postmedian line generally broad, especially in the ♂, often almost as broad as the green band beyond it; an additional white line at the distal margin and, best developed in the ♂♂, a slender antemedian, more or less curved and often approaching the postmedian. Hindwing generally more whitish proximally than in *viridans*, but never wholly white. Range about as in *viridans*, and likely to prove a race of the Indian *parvulata Walk.* The type of *albistrigata* was from Quilimane.

frustratoria. **M. frustratoria** *Wllgrn.* (= ? oleagina *Warr.*, ? serratieornis *Warr.*). I formerly believed that there existed side-by-side with *albistrigata* a closely similar species with slender postmedian line and obsolete antemedian, and still think it not unlikely that this may be the case, as some ♂♂ seem to have the antennal teeth less developed than in true *albistrigata*: but the markings of the latter are so variable, and most of the material in the supposed *frustratoria* is in such bad condition, that much uncertainty surrounds the question. The forms named by Warren were from Natal; the type of *frustratoria* a ♀ from E. Caffraria.

75. Genus: **Androzeugma** *Prout*

Differs from *Mixocera* in the less minute palpus, stronger tongue, simple antenna of the ♂, thinner scaling and a tendency, though variable, for the costal of the hindwing to anastomose with the cell for a short distance near the base, especially in the ♂. In the type species, the 1st subcostal of the forewing arises from the stalk of the others and the 1st median of both wings is stalked with the 3rd radial. The species which is provisionally placed with it (*mollior*) has the 1st subcostal from the cell, the other stalkings variable.

tenuis. **A. tenuis** *Warr.* (= hapala *Prout*) (4 k). An inconspicuous species, but not difficult to determine with the aid of the structural characters. *tenuis Warr.* was founded on two specimens which were not even congeneric, but his ♀, which is the *Androzeugma*, was treated as the holotype and my name of *hapala* must sink. See *Prasinocyma simiaria Guen.* Nigeria (loc. typ.), Gold Coast, Senegal and Gambia.

mollior. **A. mollior** *Prout* (5 d) is less thinly scaled and with less specialised venation; the costal of the hindwing anastomoses at not, or scarcely, more than a point and the insect is in effect a *Neromia* with the frenulum lost. S. Rhodesia.

76. Genus: **Eucrostes** *Hbn.*

A diagnosis of this genus, with some account of its geographical distribution, has been given in Vol. 4, p. 33 Distinguished from the pectinate section of *Mixocera* by its longer palpus and generally by its coloration and some details of venation, from *Androzeugma* by its robust build, dense scaling and strongly pectinate antenna, at least in the ♂. Antenna of ♀ pectinate or occasionally only serrate. Forewing with 1st subcostal arising from the cell, generally running into the costal. The species of the typical group are very homogeneous; a few long-winged species must ultimately be removed.

astigmatica. **E. astigmatica** *Prout* belongs to the typical group, but presents a somewhat different appearance on account of the absence of the red cell-dots and terminal line, only the distal half of the fringe being tinged with rose-colour; lines very weak. Expanse 15—16 mm in ♂, 19—20 mm in ♀. British Somaliland.

pygmaea. **E. pygmaea** *Rbl* (= insularis *Prout*) is very similar to *astigmatica* but smaller and with a small brown-red cell-dot on each wing. Structurally different from it in its stronger sexual dimorphism: palpus short in ♂, rather strongly elongate in ♀, antenna of ♀ not (as in *astigmatica*) pectinate. Socotra.

disparata. **E. disparata** *Walk.* (= parvulata *Walk.*, albicornaria *Mab.*, iocentra *Meyr.*, barnardae *T. P. Luc.*, rubridisca *Warr.*, nanula *Warr.*) (4 k). Similar to the genotype (*indigenata Vill.*), agreeing in the red cell-dots and wavy terminal line. On an average smaller, the costal margin of the forewing white, the fringes much paler reddish than the terminal line, the whitish postmedian line generally better developed than in *indigenata*. I can find no tangible difference between the Indian form *disparata*, the Madagascar and Comoro *albicornaria*, the Queensland *iocentra* and the E. African *rubridisca* and believe we have to do with a single, extremely widely
beatificata. distributed species. In Continental Africa it extends from Kenya Colony to Pondoland. — **beatificata** *Walk.*, from W. Africa (Sierra Leone to Nigeria and Uganda) is perhaps a tenable race by the better developed white lines.

rhodophthalma. **E. rhodophthalma** *Prout.* Expanse (♀) 22 mm. Palpus with terminal joint long. Ground-colour slightly more bluish than in *disparata*, costal margin of forewing more broadly white; cell-spots larger, white-surrounded, the wavy red terminal line enclosing — at least in part — some irregular white spots at the distal margin. Cape (type) and Natal, very rare.

E. rufociliaria *H.-Sch.* (= roseata *Warr.*) (5 d). Hitherto placed here, but probably requires a separate genus, not only on account of the elongate wings and their relatively long cells, but also of its short palpus, even in the ♀, and aborted tongue. Cape, rare. *rufociliaria.*

77. Genus: **Allochrostes** *Prout*

An exclusively African genus, differing from *Eucrostes* principally in that the costal vein of the hindwing anastomoses very strongly with the subcostal, often nearly to the end of the cell. Abdomen with white dorsal spots, generally in part surrounded with red.

A. impunctata *Warr.* (= rubridentata *Warr.*) (4 k). Very similar to *saliata* (4 l) but with the cell-dots white, not red, the white lines fairly well developed though very fine. Very widely distributed in Africa south of the Sahara, though I have no record for Cape Colony. The type locality is Mombasa Island. *impunctata.*

A. saliata *Feld.* (4 l) is rarer than the preceding and much more restricted in its range. Natal (type) to Tanganyika Territory. *saliata.*

A. biornata *Prout* (4 k) is smaller, the forewing narrower and with broadly rosy, white-mixed costal border; both wings with white, red-ringed cell-spot and with red, white-spotted border. Natal (type) to S. Rhodesia. *biornata.*

A. imperfecta *Prout* (5 d). At least as small as *biornata* (14 mm). Face green. Wings green, scarcely so bright as in *saliata*, entirely without red markings, the lines greenish white, very fine. Transvaal; Warmberg, 1 ♂. The hindlegs are wanting in the unique type, but the rest of the structure agress well with *Allochrostes*. *imperfecta.*

78. Genus: **Allochlorodes** *Prout*

Tongue more vestigial than in *Allochrostes*, or perhaps wanting. Antenna of ♀ perhaps merely serrate (not certainly known). Wings more elongate, the forewing more triangular; hindwing with costal vein anastomosing to scarcely ½ cell; both wings with 1st median widely separate at origin from 3rd radial. Abdomen without dorsal pattern; hindwing white. Erected for a single species which does not conform well either to *Allochrostes* or to *Xenochlorodes* and has more the shape and facies of *Chlorosterrha*.

A. elpis *Prout* (5 d). Smaller than *Chlorosterrha semialba* (2 g) rather brighter and less bluish green and differing in the structural characters — 2-spurred hindtibia, anastomosis of costal vein of hindwing and others. Cape of Good Hope. *elpis.*

79. Genus: **Xenochlorodes** *Warr.*

Distinguished from *Syncollesis* by the absence of the proximal spurs of the hindtibia. See further Vol. 4, p. 34. To the three Palearctic species there has subsequently been added one South African.

X. xina *Prout* (5 d). Less vivid green than *beryllaria Mann*, the lines faint. Differs structurally in the still more minute palpus, apparent absence of tongue, rather shorter anastomosis of the costal vein of the hindwing and wide separation of the 1st median of both wings. Transvaal (type), Tanganyika and Natal. *xina.*

80. Genus: **Acidaliastis** *Hmps.*

Differs chiefly from *Xenochlorodes* in the narrower wings and different colour-scheme, the hindwing being generally white, the forewing oftenest brown. Antenna of ♀ generally pectinate. Costal of hindwing anastomosing to near end of cell. The wing-shape, coloration and nearly central position of the 2nd radial superficially suggest Sterrhinae. The discovery of the ♂♂ of *subbrunnescens* and *bicurvifera*, which were founded on ♀♀, has shown that the genus is not a very natural one, for they are evidently derived, by the loss of the frenulum, from a form cognate to *Hemidromodes*. All the species are African.

A. ♂ hindtibia simple, with 2 spurs.

A. (?) porphyretica *Prout* (4 k) is placed here provisionally, but its systematic position is doubtful. ♀ antenna not pectinate. Hindwing not paler than forewing. Madagascar. *porphyretica.*

A. (?) prophanes *Prout* is also aberrant in the non-pectinate ♀ antenna, but more normal in colouring. Expanse 16 mm. The only known ♂ is brownish drab, with very fine pale edges to the slightly darker central area. ♀ white, slightly tinged with buff, especially at costa; lines black-brown, on forewing thickened anteriorly, *prophanes.*

the antemedian at 1/3, the postmedian from 3/4 costa, slightly dentate, at both folds incurved, continued on the hindwing. Zululand (type) and Portuguese East Africa.

micra. **A. micra** *Hmpsn.* (= vinnularia *Rbl.*) (5 b) is recognizable by its very small size, straighter lines and
dissimilis. distinct cell-dot. Aden (type) and Socotra. — **dissimilis** *Warr.* (= desertoria *Rbl.*) (5 c) is less small, forewing
saturata. more brownish, the cell-dot generally larger. Sudan, the Sahara, Egypt and Sinai. — ab. **saturata** *Rothsch.*, founded on a ♂ from Asben, has the forewing much darker ("greyish chocolate-brown"), with thick white antemedian and subterminal lines.

B. ♂ hindtibia swollen, with 4 spurs.

subbrunnescens. **A. subbrunnescens** *Prout* has the forewing more sand-colour, the cell-dot wanting, the lines more oblique than the distal margin, generally weak. Somaliland (type) and Rharis.

bicurvifera. **A. bicurvifera** *Prout* (5 d). Larger than *subbrunnescens* (21 mm), with costal margin of forewing more rounded, the two principal lines more curved anteriorly, the pectinations of the ♀ antenna rather longer. Transvaal (type) and White Nile.

curvilinea. **A. curvilinea** *Prout* (4 h). ♂ still unknown, but its apparently close relationship to *bicurvifera* allows of its being placed here. Forewing bright green, not brown, in the type form with only the outer line, which
mixta. is fine, strongly curved, sometimes faint. Transvaal; ? Kenya Colony. — **mixta** *form. n.* (? *sp. div.*) has the costalmargin broadly light-brown, the green ground-colour paler, a proximal white line as distinct as the distal, still more oblique, reaching the hindmargin quite near the base. Woodbush Village, Transvaal, April 1915 (C. J. Swierstra), type ♀ in coll. Prout. Suggests a possibility that *bicurvifera* is only a form of the same variable species.

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3. Subfamily: **Sterrhinae.**

The name *Acidaliinae*, employed in our Fauna *Palaearctica* volume, is untenable for the reason noted under the genus *Scopula* (infra); that of *Sterrhinae* is therefore substituted, following Meyrick and Warren.

A moderately long summary of the characters and classification of the subfamily has been given in Vol. 4, pp. 34, 35. It is generally best recognizable by the venation. An "arcole", single or double, is almost invariably developed in the forewing, such as otherwise only occurs in the *Larentiinae* or very exceptionally in the *Geometrinae*. From the *Geometrinae*, the *Sterrhinae* are distinguished absolutely by the complete development of the 2nd radial of the hindwing as well as by the course of the costal vein of the same. This latter is nearly always very characteristic in the *Sterrhinae*, anastomosing with the cell at a point near the base, thence rapidly diverging. There are, however, a few genera, or even individual species (see *Sterrha lilliputaria Warr.*), in which the anastomosis is greatly prolonged, exactly as in the *Larentiinae*, in which subfamily the point-anastomosis is never found. In these few difficult cases the correct location can generally be found from other characters — the smooth face, generally narrower wings, longer cells, greater development of the 1st discocellular (tract between 5th subcostal and 1st radial) of the forewing and frequent specialisations of the ♂ hindleg, not rarely also the loss of one or more spurs on that of the ♀. Only in the *Asthena* group is there any real difficulty, and this, for the sake of a simple taxonomy, is at present assigned to the *Larentiinae*.

The *Sterrhinae*, which comprise already well over two thousand known species, are relatively not particularly numerous in the African Region and produce there almost no special endemic developments. The interesting *Cosymbia-Anisodes* group is very poorly represented; and with the exception of the beautiful *Ptochophyle* and *Chrysocraspeda* and a few striking representatives of *Somatina* and *Problepsis*, the African *Sterrhinae* give us little excepting small and obscure species belonging to the two huge genera *Scopula* and *Sterrha*. In these, on account both of their unattractiveness to the average collector and their difficulty to the systematist, there must be still an enormous number of species awaiting discovery or differentiation.

1. Genus: **Metallaxis** *Prout.*

Palpus short. Tongue present. Antenna of ♂ with fascicles of cilia. Hindtibia of ♂ with 2 spurs or spurless; of ♀ with 4 spurs. Forewing with apex blunt, distal margin smooth, cell rather short, areole double, 2nd subcostal arising from the cell. Hindwing with margin slightly prominent or bent about the 3rd radial, cell rather short, 2nd subcostal shortly stalked with 1st radial.

I founded this genus on two Indian species, *semiustus Swinh.* and *semipurpurascens Hmpsn.*, but have included provisionally the following from Madagascar, as it only deviates in relatively unimportant details.

M. teledapa *Prout* (6 a). Smaller than the typical species, 3rd joint of palpus slightly less short, cell of forewing a little less short, hindwing with abdominal margin relatively longer, somewhat prominent at the angle. Very distinct from all hitherto known species, superficially recalling the South American "*Acidalia*" *imitans Dogn.* (*Hamalia*). The very dense irroration of the more reddish parts gives them a somewhat powdery appearance. Face brown-red. Underside quite pale, almost unmarked, with red terminal line and darkened fringes; forewing also with red costal edge, not very sharp cell-mark and some reddish suffusion in and beyond cell. Hindtibia of ♂ with strong pencils and no spurs, tarsus slender, nearly $^2/_5$ tibia. Diego Suarez. *teledapa.*

2. Genus: **Dithecodes** *Warr.*

A comprehensive genus, or group of closely allied genera, characterized by the ciliated antennae and the presence of terminal spurs only on the hindtibia in both sexes (see Vol. 4, p. 46, where the German edition contains a double misprint which, however, can scarcely have occasioned any misunderstanding), nearly always also by the divided areole of the forewing; the dividing vein (base of the 2nd subcostal) can arise either from the cell or from the stalk of subcostals 3—5. Hindwing with 2nd subcostal from the end of the cell or very shortly stalked. The 15 hitherto described species are scattered in Africa, Asia, New Guinea and South America; the only two African are very closely related to one another, and have the hindwing almost regularly rounded. whereas in the genotype and some others it is distinctly angled.

D. ornithospila *Prout* (6 a). Forewing with areole nearly always double, both ample, the dividing wall arising from the cell. Lines slightly or scarcely sinuous, not at all denticulate. Named from the angular white cell-mark of the hindwing, which recalls in shape that of the Indian genus *Ornithospila*, it is, however, similarly developed in some forms of the following species. Described from the Cameroons, but reaches the Ivory Coast and Abyssinia. *ornithospila.*

D. delicata *Warr.* is, in its name-typical form, decidedly smaller than *ornithospila* (6 a). Areole undivided or, if divided, with the distal part small, the wall arising from the stalk of the 3rd—5th subcostals. Postmedian line more distally placed than in *ornithospila*, waved or subcrenulate. Described from Masindi, known also from the Congo. — **brunneifrons** *Hmpsn.* (6 a) is a larger form, which was taken in numbers by Doherty in the Kikuyu Escarpment. *delicata.* *brunneifrons.*

3. Genus: **Anthemoctena** *Warr.*

Tongue short and very slender. Antenna of ♂ with extremely slender, strongly ciliated pectinations. Hindtibia in both sexes with a single strong median spur and a terminal pair. Forewing with areole single. Hindwing with the costal anastomosing with the subcostal to about the middle of the cell — an extremely rare character in this subfamily; 2nd subcostal not or scarcely stalked. A somewhat isolated genus of a single species, but with general affinities to *Rhodostrophia* and *Dithecodes*.

A. textilis *Wllgrn.* (= lineata *Warr.*) (6 a) cannot, if the structure be considered, be confused with any known species; from all similar obliquely-marked *Scopula* it is distinguishable at a glance by the unmarked hindwing. Transvaal to the Cape. *textilis.*

4. Genus: **Palaeaspilates** *Warr.*

A distinct genus in facies, the genitalia, moreover, showing no close affinity with any other yet studied; but somewhat lacking in salient characters for diagnosis. Face a little more sloping than in most *Sterrhinae*, palpus rather strong. Antenna of ♂ strongly pectinate. Hindleg long and slender, in both sexes with 4 long spurs. Forewing with apex minutely produced; areole single, the 1st subcostal separating before the 5th. Hindwing with the costal diverging from the subcostal more gradually than in typical *Sterrhinae*. Only two species known, both South African.

P. inoffensa *Warr.* (6 a). Rather variable in colour and in the strength of the postmedian, which generally consists of a row of dots in addition to the thick, not very sharply defined, grey or brown line. Hind- *inoffensa.*

rubida. wing weakly or scarcely marked. Cape and Natal, locally common. — ab. **rubida** *Warr.* is the reddest form of the species.

mansueta. **P. mansueta** *Prout* (6 a). Costal margin of forewing less rounded, apex less pointed, colour paler (light yellow-grey), postmedian line on forewing simple, on both wings almost parallel with distal margin. Bushmanland, Cape, only the type known.

5. Genus: **Ptochophyle** *Warr.*

In most of its superficial characters (antenna, leg-structure, venation of forewing) agreeing with *Palaeaspilates*, though the genitalia show a much closer relationship to the Palaearctic *Calothysanis* (= *Timandra*). In the hindwing the costal vein anastomoses at a point with the cell and then diverges sharply, and the 1st and 3rd radials show a tendency to become stalked with the adjacent veins, though this latter character is inconstant. The ♀ antenna is stouter than that of *Palaeaspilates*, at least proximally, and is generally well ciliated, in a few Indo-Australian species pectinated. The genus consists of small, generally gaily coloured species, usually with more or less bent or angled hindwing. Chiefly Indo-Australian, but well represented on Madagascar, very sparingly in Continental Africa.

apicirubra. **Pt. apicirubra** *Prout* (6 b). Very distinct from all the other species in the ample red, black-mixed apical patch of the forewing. Madagascar.

orthogramma. **Pt. orthogramma** *Prout* (5 f) is noteworthy on account of its remarkable superficial resemblance to some South American *Semaeopus* of the section *Dichromatopodia Warr.* This and the following 4 species, together with *zaphleges*, *gnamptoloma* and *kenricki*, were all collected in the mountains of Central Madagascar in 1911 by Mr. F. B. Pratt.

volutisignata. **Pt. volutisignata** *Prout* (5 h). Hindwing, as in the preceding species, scarcely bent; coloration more normal for the genus. The highly sinuous ante- and postmedian lines are in strong contrast to the straight median. Described from a single ♀.

polyniphes. **Pt. polyniphes** *Prout* (5 h). Smaller than *volutisignata*, distal margins more bent, lines less distinct, a number of white spots developed.

peristoecha. **Pt. peristoecha** *Prout* (5 h). Hindwing rounded. The coloration and markings more recall some South American *Eois* than either of the neighbouring species.

anthocroca. **Pt. anthocroca** *Prout* (5 h) is also bright yellow, but the markings are brighter purple-red than in *peristoecha*, more copious and quite differently arranged. Termen of hindwing weakly bent in the middle.

hilaris. **Pt. hilaris** *Warr.* Perhaps nearest to *anthocroca* (5 h), but rather broader-winged, the purple markings scarcely so bright (but the unique type is worn), costal region of forewing proximally more broadly and heavily suffused, median band broader, but more mixed with yellow, bounded by narrow yellow bands, hindwing rather broadly yellow outside the cell-spot, which is small. Warri, S. Nigeria, 1 ♀.

dollmani. **Pt. dollmani** *Prout* (5 h) has about the shape of *hilaris*, but is considerably larger, the postmedian line much more distally placed, not widened into a band, on the forewing more sinuous; very characteristic is the variegated central band of the forewing, with its bright red and black-grey markings. Underside similarly marked, the hindwing a little paler, the forewing with the red less bright, but suffusing also a part of the proximal area. N. W. Rhodesia: Solwezi, April 1918 (H. C. Dollman), type ♂ in Mus. Brit.

rubripennis. **Pt. rubripennis** *Warr.* (= sanguinolenta *Warr.*) (6 b). Rather broad-winged, pink with fine yellow lines and more or less macular, more or less confluent yellow subterminal and terminal. Congo (type), S. Nigeria and Angola.

apseogramma. **Pt. apseogramma** *Prout.* Near *rubripennis* (6 b), perhaps a form. Not quite so broad-winged; forewing with the lines somewhat more approximated, the antemedian less bent at its ends; hindwing with the 2nd line more sharply angled, cut at its angle by a broad longitudinal cream-yellow line which runs in front of the median vein and the 3rd radial, starting proximally of the 1st line and continuing, though slenderly, as far as the macular subterminal. N. W. Rhodesia: Solwezi, 6 December 1917 (H. C. Dollman), type ♂ in Mus. Brit.

subminiosa. **Pt. subminiosa** *Prout.* Hindwing more strongly angled than in the two preceding. Colour less bright (yellow mixed with pink). Forewing with an elongate dark cell-mark (as in the Indian *miniosa Warr.*), lines fine and weak, faintly dark-edged in median area, the antemedian acutely angled in cell, the postmedian as sinuous as in *miniosa*, but nearer to the cell-spot. Hindwing still more weakly marked, the cell-spot white, very small. N. W. Rhodesia: Mwengwa, 30 December 1913 (H. C. Dollman), type ♀ in Mus. Brit.

Pt. hyalotypa *Prout* (5 h). Head between the antennae whiter than in *rubripennis* (6 b); forewing slightly narrower, duller, more vinaceous-brown, lines less oblique, less uniformly developed throughout; hindwing quite distinct in shape, coloured as forewing, but with a somewhat hyaline white spot, which interrupts the second yellow line. Lake Kivu: Rugege Forest, Ruanda district, 7000 feet. A similar *Ptochophyle* from Lowa Valley (T. A. Barnes) may also be mentioned, but is in such poor condition that nothing can be made of it. *hyalotypa.*

Pt. definita *Prout* (6 a) is also yellowish ochreous with reddish irroration, but the hindwing is strongly gibbous, with the projection at the 3rd radial and the 1st median, and the chocolate-coloured markings are arranged as in yet another South American group of the *Sterrhinae*, as exemplified in *Ptychamalia nigromarginata Dogn.* Tananarivo district. *definita.*

Pt. rubida *Swinh.* is rather broad-winged, more orange red than *zaphleges*, the areole shorter, with the 1st subcostal stalked beyond it. Madagascar, 1 ♀, described as *Stegania* (!). — **zaphleges** *Prout* (5 h), in spite of its smaller size, narrower wings, redder colour and slightly different venation (1st subcostal from apex of areole), will perhaps prove to be a ♂ form (or mountain form) of *rubida*. Mountains of Central Madagascar. *rubida.* *zaphleges.*

Pt. doricaria *Swinh.* is marked on the abdominal margin as in *peristoecha* (5 h), but the yellow ground-colour is very heavily clouded on the forewing with vinaceous, leaving free the broad, sinuous ante- and post-median lines, some spots in central area and an interrupted submarginal band. Hindwing less clouded proximally; small black cell-dots. Abdomen dorsally with a large purple-grey patch. Madagascar, only ♀♀ known. *doricaria.*

Pt. gnamptoloma *Prout* (5 g) is characterized, apart from the elongate white cell-marks, etc., by the gibbous forewing and strongly angled hindwing. Central Madagascar. *gnamptoloma.*

Pt. kenricki *Prout* (5 g). A lovely little species, with the hind-, but not the forewing shaped as in *gnamptoloma*. Recognizable at a glance by the pure white postmedian half-band and subterminal spots of the forewing. Central Madagascar. *kenricki.*

Pt. zearia *Swinh.* Dull dark purplish, with narrow yellow borders, which become rosy on meeting the ground-colour; forewing in addition yellow at middle of costa and with a paler yellow stripe from tornus oblique towards costa, separated from a large apical patch of the ground-colour by a rosy area. Hindwing with termen bent; a black cell-dot. Madagascar. *zearia.*

Pt. planaria *Swinh.* Rather larger than *zearia* (31 mm), hindwing rounded. Groundcolour similar, markings wanting, excepting small white, indistinctly dark-edged cell-dots; fringes yellow. Madagascar. *planaria.*

Pt. zombensis *Prout* (5 g). Rosy, almost entirely washed over with pale purple-drab and with bright gold-yellow borders and fringes; in shape and coloration extremely like a ♀ of the Indian *togata Fb.*; cell-spot of hindwing pale primrose yellow, not white; forewing above with a small red cell-dot; faint red ante- and postmedian lines, the latter more strongly outbent in the middle than on the forewing of *hyalotypa* (5 h). Nyasaland: Zomba, April-May 1925 (H. Barlow), 1 ♀ in coll. Joicey. *zombensis.*

Pt. eclipsis *Prout* is distinct in shape, the distal margin of both wings being markedly sinuous, the concavities of the forewing coming between the 5th subcostal and 3rd radial and between the 1st median and 2nd submedian, the anterior one of the hindwing deeper, but only commencing at the 1st radial. The only known example, a ♀ from Madagascar, is further characterized by the heavy cloudings of dark grey which overspread most of the hindwing and a great part of the forewing, leaving 6 costal spots and 2 macular lines close to termen yellow, some ill-defined anterior postmedian markings rose-colour. *eclipsis.*

6. Genus: **Chrysocraspeda** *Hmpsn.*

Closely related to *Ptochophyle*, scarcely differing except in the absence of the areole, all the 5 subcostals being more or less long-stalked. Area of distribution similar; from the African Region, however, very few species are yet known, all closely related.

Ch. rosina *Warr.* (6 b). Only known in a few examples, from Warri, S. Nigeria, but evidently variable. A small species, with oval white cell-spot on hindwing, the narrow yellow borders interrupted in the middle, the fringes here dark-mixed. — **heterora** *Prout* differs from all other known examples in having yellow subterminal spots, especially between the 3rd radial and 1st median, the yellow borders of the forewing widening more triangularly in its posterior part, the hindwing perhaps more acutely angled at the 3rd radial. Soundedon, near Macenta, French Guinea, 1600 feet, 1 ♂. Possibly a distinct species. *rosina.* *heterora.*

Ch. leighata is likewise variable, and may even prove to consist of further races of *rosina*. Distal margin of forewing less bent, cell-mark of hindwing small, dark. Two principal forms are known to me. — **holobapta** *Prout* (= medjaria *Holl.*), from the Congo and Uganda, has both wings as far as the yellow border uniformly dull Indian purple, purple terminal dots well developed. — **leighata** *Warr.* (6 b) from Natal, is lighter *holobapta.* *leighata.*

and brighter, typically with a dark shade between the rosy ground-colour and the yellow border, terminal dots
dehonorata. obsolete. — ab. **dehonorata** *Prout* lacks the subterminal dark shade.

nigribasalis. **Ch. nigribasalis** *Warr.* may probably prove a very remarkable aberration of *leighata* (6 b), as the type ♂ was, like that, taken in the Durban district and, so far as I know, has not been matched. Forewing almost wholly dark purple as far as $^2/_3$ costa and $^4/_5$ hindmargin, then yellow with some purple strigulation. Hindwing similarly dark purple to end of cell, then brighter purple, distally becoming irregularly yellow.

erythraria. **Ch. erythraria** *Mab.* (= rosacea *Pagenst.*) (6 b) is the island representative described by Mabille from Madagascar, by Pagenstecher from the Comoro Islands, and may easily be a pale dwarfed form of *leighata* (size of *rosina*). Tone a little more violet, hindwing more bicoloured, perhaps strengthening the suggestion that the variegated *nigribasalis* is also conspecific.

heringi. **Ch. heringi** *Prout* (5 g). Forewing rather narrower than in *rosina*, distal margin more regularly curved. More mixed with yellow (especially in proximal area of forewing) and with dark irroration; cell-spots black, that of hindwing elongate; a yellow postmedian narrow band or thick line, on the forewing sinous, on the hindwing bent parallel with termen; forewing also with interrupted yellow subterminal and indication of curved dark antemedian. Hindwing beneath much paler. S. Cameroons: Lolodorf, type ♀ in Zool. Mus. Berlin.

7. Genus: **Ptomophyle** *Prout.*

Palpus rather short; 3rd joint rather small, especially in the ♂. Antenna in the ♂ with long pectinations, apical $^1/_6$ merely ciliated; in the ♀ with very short ciliation. Hindtibia as in the two preceding genera. Forewing with apex acute, distal margin bent in the middle, areole single, 1st subcostal from its apex or oftener stalked beyond, cell somewhat shortened, with 1st median connate or stalked (in *Ptochophyle* separate). Hindwing with apex pronounced, a blunt angle at 3rd radial. Genitalia of ♂ in several respects similar to those of *Traminda*, which, however, have a complicated quadripartite uncus and a costal arm from the valve, while *Ptomophyle* has a simple, short, blunt uncus. Only one species.

subcarnea. **Pt. subcarnea** *Warr.* (6 b). In shape and markings suggesting a brown *Traminda*, though with a straighter and scarcely oblique median line, to which succeeds, in well marked specimens, a rather distinct dark shade. Described from the Congo, commoner in the Cameroons, known also from French Guinea.

8. Genus: **Chlorerythra** *Warr.*

Nearly related to *Traminda*, of which at one time I inclined to make it a section. Shape and habitus different, notably in that the hindwing lacks the colour of the forewing and is without markings; genitalia different both in the shape of the uncus and the nature of the sacculus; hindwing with the 3rd radial and 1st median well separate. Only one species is known, unless *carnea* is correctly placed, which seems to me very doubtful.

rubriplaga. **Ch. rubriplaga** *Warr.* (6 b). Easily known by its elongate wings, oblique red streak with whitish distal edging, and reddened fringe. The underside shows even more clearly than the upper that the insect rests with the forewing nearly covering the hindwing; the latter wing is flushed with pale rose and has two darker rosy lines (postmedian and subterminal) and this coloration and marking is exactly continued on the forewing costally and apically, while the rest of the wing remains white, only with a shadowy reflection of
rufa. the line of the upperside. — ab. **rufa** *ab. nov.* may be taken to designate the form in which the green of the forewing is supplanted by pinkish, analogous to *Traminda ocellata* ab. *rufa Warr.*; in neither can the colour accurately be called "rufous", but as this dimorphism in colour is very characteristic of *Traminda* and its outliers it should ideally have received a uniform nomenclature from the first. Nametypical *rubriplaga* is distributed
extenuata. from Nyasaland and S. Mozambique to the Cape. — **extenuata** *Prout* is a small and weakly marked race from Kenya Colony, Tanganyika and Somaliland.

carnea. **Ch.** (?) **carnea** *Warr.* is unknown to me, but as it is described under Warrens *Fidoniinae* it is probable (unless that was due merely to oversight) that it is entirely misplaced here. In any case it cannot be very near to *rubriplaga*. 36 mm. Forewing ochreous, with flesh-coloured speckling, cell-spot and lines rather more deeply coloured; first line very indistinct, but with red dots on the veins, postmedian thick, slightly sinuous (outward near costa, inward at fold), edged distally by a paler line; fringe flesh-colour. Hindwing paler, with an outer line and some terminal shading. Underside paler and more glossy, with cell-spots and outer line. Bushmanland, 1 ♂.

9. Genus: **Traminda** *(Saalm.) Warr.*

Palpus extending well beyond frons, rather strong in comparison with typical *Sterrhinae*, the 3rd joint well developed, especially in the ♀. Antenna in ♂ with moderate or long pectinations, in ♀ simple. Hindtibia

with all spurs, in the ♂♂ of Section B strongly tufted. Forewing with apex acute, often minutely produced, termen variable, areole generally small (in rare aberrations of *obversata* wanting), with all the subcostals stalked beyond it, or the 1st arising just before or at apex of areole. Hindwing variable in shape, cell less than ½ wing-length, 1st radial and 1st median variably stalked (the latter in *rufistrigata* often separate). A good link between the early genera and *Anisodes*.

Chiefly African, but with Indo-Australian stragglers.

A. ♂ hindleg simple.

T. rufistrigata *Hmpsn.* (6 c). The smallest species of the genus, rather long-winged and in many ways anomalous. Apparently derived from the common base of *Chlorerythra*, *Traminda* and *Anisodes*. With the first it agrees approximately in shape and in the relatively long cells, and it may perhaps require to be transferred; with *Traminda* in having the 1st median of the hindwing from or close to the end of the cell and in the ocellated cell-marks, with *Anisodes* in having the origin of the 5th subcostal of the forewing well proximal to that of the 1st but not in the palpus. Described from Aden but found on the Red Sea Coasts from Suakin to. British Somaliland. — **marcida** *Warr.* is a pale, weakly marked form from the Sudan, described from Nakhela, S. E. of Berber. On an average somewhat larger. A single worn ♂ from Asben seems to agree, perhaps also some poor specimens from Manda Island, East Africa. *rufistrigata.* *marcida.*

T. acuta is intermediate between *rufistrigata* (6 e) and *falcata* (6 c), perhaps a further development of the former, but with apex and termen of hindwing more rounded than in both. Larger than *rufistrigata*, more strongly marked, in particular with a well-developed median line, on the forewing oblique from costa near apex (in contact with the slender postmedian), on hindwing only developed posteriorly — altogether recalling a *Lycauges*. Hindwing with the 1st median less irregular than in *rufistrigata*, though still slightly variable. — **acuta** *Warr.*, from Natal, was the earliest named form, but so few specimens are yet known to me, and in such indifferent condition, that it is difficult to say wherein (if at all) it differs constantly from the East African form. Perhaps browner, at least beneath, with the oblique line brown rather than grey, and never (so far as is yet known) particularly thick. I have a rather large ♂ from Salisbury, S. Rhodesia, which belongs here rather than to *pallida*. — **pallida** *Warr.* (6 b) is very variable, typically rather small and with the ground-colour pale, the oblique line the strongest marking. Some aberrations have the cell-mark strongly black-ringed, hence very conspicuous, others have the oblique line dark and strongly thickened, others combine these two characters. — ab. **anandaria** *Swinh.* is rather larger, brown-tinged, the oblique line rather slender, the postmedian almost equally strong; scarcely worthy of a name. — *pallida* is common in Kenya and reaches northward and southward into the adjacent territories. *acuta.* *pallida.* *anandaria.*

T. falcata *Warr.* (6 e) is of a warmer brown, the forewing with apex more falcate, the hindwing with distal margin distinctly bent or weakly angled at the 3rd radial. The oblique line in the type is weak, but in some aberrations it becomes strong, recalling *Calothysanis*. Underside strongly strigulated. Natal (loc. typ.) and Portuguese East Africa. *falcata.*

T. drepanodes *Prout* (5 g). Apex distinctly falcate, angle of hindwing weak. Very distinct from the species which follow (unless from *atroviridaria*) in the strong and highly oblique line, which is angled close to costa. Cell-mark of forewing longer than in *neptunaria* (6 e). Cameroons, Congo and Unyoro. *drepanodes.*

T. vividaria *Walk.* (= ledereri *Wllgrn.*, nigripuncta *Warr.*) (6 c). Variable in colouring, but cannot well be confused with any other species. The small black cell-dot of the forewing is pretty constant, and both this and the shortened cell of the hindwing (bringing the white cell-dot almost as near to the base as to the postmedian line) separate it readily from weakly marked forms of *ocellata*, its nearest ally. The type form is the green one. — ab. **variegata** *Swinh.* is variegated, partly green, partly pink. — The plain pink forms are called, by analogy with those of the following species, ab. **rufa** *Prout.* The species is extremely widely distributed, Senegambia to Nigeria, Unyoro, S. Sudan, British East Africa to Natal, Madagascar. Walker's and Wallengren's types were from Caffraria, Warren's from Liberia. *vividaria.* *variegata.* *rufa.*

T. ocellata *Warr.* (6 c). Generally recognizable at a glance by the slightly angular, sharply marked ocellus of the hindwing; only in rare aberrations is this subobsolete, bringing about a superficial resemblance to *vividaria* (6 c) (see above). — ab. **rufa** *Warr.* is the reddish form. Range less wide than that of *vividaria*; only known to me from Unyoro and from South Rhodesia to the Cape. *ocellata.* *rufa.*

T. atroviridaria *Mab.* (described as *Thalera*). I have formerly assumed this to be a prior name for *ocellata*, but on re-reading the description I find that no size-indication is given, which adds another element of uncertainty to those offered by the assumed locality (Madagascar) and two details in the description. Perhaps a race, not yet rediscovered, with both the red cell-rings equally developed and rounded; but the oblique line of the forewing is said to arise "near the apex". *atroviridaria.*

B. ♂ hindfemur and hindtibia densely tufted.

obversata. **T. obversata** *Walk.* (= glauca *Warr.*, striata *Warr.*) (6 c) differs strongly in shape from all other species of this section, the elongate forewing somewhat recalling *acuta* or *Chlorerythra*, while the hindwing has the apex rather sharp and the abdominal margin fairly long. Distributed almost everywhere from Sierra Leone *atroviridata.* to Angola and South Rhodesia and with very little variation. — **atroviridata** *Saalm.* (= decessata *Saalm.*) (6 c) is perhaps on an average smaller, but differs chiefly in having the oblique line firm, not punctiform on the *rufa.* veins. — ab. **rufa** *Prout*, with the ground-colour pinkish, occurs with this race but I have not seen it in *obversata.* Madagascar.

syngenes. **T. syngenes** *Prout* is closely like a weakly marked *neptunaria* (6 c) but much smaller (26 mm), flesh-colour and with the outer line of the hindwing less sinuous. Oubangui-Chari-Tchad, only the type ♂ known. Possibly a remarkable aberration of *neptunaria*.

viridipennaria. **T. viridipennaria** *Guen.* is almost certainly a small form of *neptunaria*, as at present understood, and the given locality ("North America") erroneous; but I have not seen the type. "28 mm" (Guenée's one *neptunaria* measured "34"), the forewing merely elbowed at the 3rd radial (in *neptunaria* rather sharply angled). When the two are definitely united, priority must be given to the long-used and correctly localised name of *neptunaria*.

neptunaria. **T. neptunaria** *Guen.* (6 c). Variable in size, in the strength of the angulation of the forewing (irrespective of size) and in the size and strength of the cell-spot of the forewing, yet always easy to recognize. I know only green forms. Founded on a ♂ from Abyssinia, but very general from Senegambia and British Somaliland to Natal.

10. Genus: **Cosymbia** *Hbn.*

On this predominantly Palaearctic genus, the reader is referred to Vol. 4, p. 141. It differs from the preceding group in losing one, or generally both, of the proximal spurs of the ♂ hindtibia and — excepting the anomalous *T. rufistrigula* — in having the origin of the 5th subcostal far proximal to that of the 1st; from *Anisodes* in the short palpus. The one African species which can be placed here was described as a *Cosymbia* by Warren, who (overlooking structural differences) suggested that it might be a race of *puppillaria Hbn.*; for the present we treat it as forming a section with 3-spurred ♂ hindtibia, analogous to *Anisodes* sect. *Pisoraca*.

unocula. **C. unocula** *Warr.* (6 e). Coloration about as in *puppillaria Hbn.* (Vol. 4, pl. 4 o). Smaller, pectinations of ♂ much longer, palpus slightly shorter, apex of forewing less produced, a cell-ring developed on the hindwing only. Varies a little in the strength of the median shade. Dar-es-Salaam (the type locality) to Nyasaland.

11. Genus: **Anisodes** *Guen.*

Palpus more or less long, especially in the ♀, 3rd joint in the ♂ variable, in the ♀ always long, often extremely so. Antenna of ♂ bipectinate, with long branches. Hindtibia of ♂ variable in structure and armature, in the principal African group (*Pisoraca Walk.*, part.) normally developed, with 1 proximal and 2 terminal spurs. Venation as in the preceding genus. The section *Pisoraca* is found also in the Indo-Australian and South American Regions, but has probably in the latter case had an independent development.

A. ♂ hindtibia with 3 spurs (*Pisoraca Walk.*).

inaequalis. **A. inaequalis** *Warr.* Almost as variable as the Palaearctic *Cosymbia puppillaria Hbn.*, yet easy to recognize by its short wings, warm colour and minutely falcate apex, which is always accompanied by a minute oblique *obliterata.* dark dash. The name-type has the median line strong, other markings slight. — ab. **obliterata** *ab. nov.* loses *polysticta.* even this line. — ab. **polysticta** *ab. nov.* (5 g) has large clusters of small dark spots in the distal area, anteriorly *subapicata.* and posteriorly, the cell-dots also strongly black-ringed. — ab. **subapicata** *ab. nov.* only develops (and on the forewing only) two strong black subterminal spots (sometimes more or less confluent) on the 5th subcostal and 1st radial. — *inaequalis* was described from Barotse, but occurs also in Angola and Nyasaland, about Delagoa Bay and in N. Madagascar.

leonaria. **A. leonaria** *Walk.* (6 d) differs structurally from the next three species in that the ♂ has the hindfemur glabrous. Apart from this it can generally be recognized by its rather paler colouring and strongly darkened costal area; the long, narrow cell-mark of the forewing shows a rather conspicuous dark dot at its anterior end. Not particularly variable. Sierra Leone and extending as far as the Cameroons.

poeciloptera. **A. poeciloptera** *Prout* (6 c). Generally the largest species of the group and with the strongest rufous tinge. Forewing rather broad, with costal margin nearly as strongly darkened as in *leonaria*; an oval space, generally very clear, is developed between this costal shade and the dark clouding which connects the median with the postmedian in the middle of the wing. Sierra Leone, Ivory Coast (loc. typ.), Gold Coast and Nigeria.

A. lutearia *Dewitz* (5 h, i) is yellower, nearly as in *leonaria* but without darkened costal margin and with the cell-mark of the forewing less narrow. Hindfemur of ♂ fringed with coarse hair, as in *poeciloptera*. Dark cloudings not so heavy as in that species, never forming a definite connecting shade between median and postmedian. Ivory Coast to Nigeria, described from Lagos. *lutearia.*

A. dewitzi *Prout* (= lutearia ♀ *Dewitz*, nec ♂) (5 i). Similar in external ♂ structure to the two preceding, though all three show good distinctions in the ♂ genitalia. Browner or more fleshy (less yellow) than *lutearia*, paler than *poeciloptera*. Median shade generally weaker and more slender than in *lutearia*, its teeth at the 3rd radial and 1st median weaker; postmedian row of dots rather more incurved between the radials and especially posteriorly; distal clouding between the radials weak, that behind the 1st median, on the contrary, typically very strong, almost black. Frequent aberrations, however, lose this latter patch and present a more uniform appearance than any other of the group. — ab. **transmuta** *Prout* has the markings tinged with olive-green. Ivory Coast (loc. typ.) to Congo. *dewitzi.* *transmuta.*

A. paratropha *Prout*, described from a single ♀ from Nguelo, Usambara, is a broad-winged species of about the size of *poeciloptera* (6 c) but with more nearly the colour and markings of *dewitzi* ab. *transmuta*, though of a deeper flesh-colour. Distinguished from all by the strongly dentate distal margin of the wings and paler underside. *paratropha.*

A. landanata *Mab.* is unknown to me and may possibly have been founded on a very weakly marked aberration, or defective specimen, of the species which I subsequently named *dewitzi*. "35 mm. Light reddish grey." The only markings mentioned are the subterminal vein-dots (visible also beneath), a transverse shade parallel therewith (? the median) and some terminal blackish scales. Underside uniform fleshy grey. Founded on a single ♀ from Landana, Cabinda. *landanata.*

A. lyciscaria *Guen.* (= bitactata *Walk.*) is the only *Anisodes* yet known from the South African subregion. Considerably smaller than the species of the preceding group, distal margin of hindwing scarcely at all crenulate. Weakly marked, except that the name-typical form has dark cloudings at the hind angle of both wings and usually at mid-termen of forewing. ♂ hindfemur glabrous, the proximal spur of the tibia long. — ab. **coecaria** *Guen.* (= deremptaria *Walk.*, sanguinata *Warr.*, caccaria *Oberth.*) lacks the distal cloudings. Guenée's types were from Namaqualand, but the range includes Cape Colony, Natal, Kenya Colony and Madagascar. *lyciscaria.* *coecaria.*

A. hirtifemur *Prout* (6 d) represents *lyciscaria* in Southern Nigeria and is scarcely distinguishable except by the ♂ hindleg, which has the femur fringed with coarse hair and the proximal spur of the tibia shortened. The face, which in both species is red above and white below, shows different proportions, less than one-half being red in *hirtifemur*, about two-thirds in *lyciscaria*. The cell-dots of the hindwing are at times sharply outlined with black, but this is inconstant. The name-typical form corresponds to *coecaria*. — The form with dark distal cloudings, which occurs with it, is ab. **bitactata** *Prout*. The series of *hirtifemur* in the Tring Museum is from Warri (including the type) and Degama. *hirtifemur.* *bitactata.*

A. diplosticta *Prout* (6 d). Rather larger and more variegated than the two preceding, the white ground-colour mottled, rather than uniformly suffused, with fleshy brownish, the dark irroration in part rather strong, at least along the costal edge of the forewing. Hindwing with termen rather less smooth, its cell-ring with a characteristic admixture of orange-red scaling. Both wings with the postmedian dots rather strong, beneath placed on a pinkish line which is not developed in *hirtifemur*; terminal dots strong, placed at and midway between the veins, the latter series the larger, more blackish and slightly more proximal. Hair of ♂ hindfemur very coarse and red-mixed. Described from S. Cameroons (loc. typ.) and Gaboon, but occurs in a quite similar form at Bingerville, Ivory Coast; thus it is extremely unlikely that *hirtifemur*, despite similarity of structure, can be a race of it; the areole is generally smaller in *diplosticta*, but varies in both. *diplosticta.*

A. metamorpha *Prout* (5 i) is again somewhat larger, generally darker and more reddish or purplish, but very variable. Antenna and vertex of head mixed with blackish. Midfemur of ♂ fringed, hindfemur still more coarsely clothed than in *diplosticta* and with the hair continued on the proximal part of the tibia. The typical form is very distinct in the large pale postmedian blotch on each wing, but this is obsolete in some aberrations. Madagascar. *metamorpha.*

B. ♂ hindtibia with 2 spurs (*Anisodes Guen.*).

A. sublunata *Swinh.* (6 d). The typical form is much like a less fleshy brown *lyciscaria* ab. *coecaria*, but consideratly larger and with still more weakly-marked underside, the cell-spots there wanting. Hindfemur of ♂ with partly red, partly light buff hair-tufts. — ab. **areolaria** *ab. nov.* has the white cell-dot of the hindwing broadly encircled with black. — ab. **argentispila** *ab. nov.* has a large white, irregularly dark-pupilled cell-spot on the hindwing. Ivory Coast to Nigeria, the type from Gold Coast. *sublunata.* *areolaria.* *argentispila.*

misella. **A. misella** *Prout* (= inornata *Warr.*, nom. praeocc.) (6 d) is evidently derived from *hirtifemur*, though the loss of the proximal spur of the ♂ hindtibia brings it into the present section. Hindtibia of ♂ densely clothed nearly to its end with coarse, specialised hair-scaling. The name-type, as Warren's name implied, is the weakly *maculata.* marked form, closely like overgrown *coecaria* or *hirtifemur*. — ab. **maculata** *ab. nov.* has irregular black macu-*mediaria.* lation in the distal area, strongest in the positions where it is found in *lyciscaria*. — ab. **mediaria** *ab. nov.* has a very thick and black median line. Described from Nigeria, known also from Ivory Coast and the Congo.

orboculata. **A. orboculata** *Prout* (6 e). Easy to distinguish by its more purplish fawn-colour, its white vertex and antennal shaft, absence of white on the lower part of face and especially by the ♂ hindfemur, which has a long curled tuft of purple-red hair, as in several Indo-Australian *Anisodes*; hindtibia glabrous. Abdomen with white and blackish spots dorsally. The type form has the white cell-dots very amply ringed with black. — *inornata.* ab. **inornata** *ab. nov.* has the rings to the cell-dots greatly reduced, quite as in the preceding species. Madagascar: Diego Suarez.

12. Genus: **Epicosymbia** *Warr.*

A small genus of African and Indian species, very near *Scopula* in shape, facies and most structural characters, but the forewing with double areole, the 2nd subcostal arising from the cell, the hindwing with the 2nd subcostal generally short-stalked with the 1st radial, never separate. Antenna of the ♂ pectinate, with long branches. Hindtibia of the ♀ with 4 spurs. Genitalia much as in *Scopula* but with well-developed uncus.

A. Hindtibia of ♂ with one strong terminal spur (*Epicosymbia Warr.*).

denticulata. **E. denticulata** *Walk.* (= perrufa *Warr.*) (6 e). The only known *Epicosymbia* with the leg-structure here noted. Further distinguishable from *perstrigulata* by the stronger, less interrupted terminal line. Both the types were from the Durban district, but the species extends to the Transvaal.

B. Hindtibia of ♂ without spurs (*Anacosymbia Prout*).

perstrigulata. **E. perstrigulata** *Prout* (6 d). The bright red-brown ground-colour is very strongly strigulated with dull whitish-yellow, markings very indistinct. Transvaal and extending into Southern Rhodesia.

chrysoparalias. **E. chrysoparalias** *Prout* (6 e) is perhaps a subspecies of *perstrigulata*, from which it differs in its stronger markings and paler underside — that of *perstrigulata* (as also of *denticulata*) is decidedly yellow, more or less strongly suffused in part with red. Terminal line heavy, as in *dentisignata*. Gold Coast and I think Ivory Coast and the Sudan.

nitidata. **E. nitidata** *Warr.* On an average larger than the 3 preceding, apex of forewing slightly more acute. Ground-colour less reddish, often quite pale, that of the underside often whitish, generally strongly marked. Natal (loc. typ.) and the Transvaal. Warren's type of *nitidata* was a remarkably weakly marked aberration *subfaseiata.* and it is unfortunate that the name which he earlier gave to the commoner form is preoccupied. — ab. **subfasciata** *nom. nov.* (= albivertex *Warr.* nec *Swinh.*) (6 e) has the median area of the forewing more or less dark-suffused, sometimes forming a handsome band; some dark suffusion also present in the posterior half of the distal area of the forewing.

spectrum. **E. spectrum** *Prout* (5 i) differs from *nitidata* in the smaller cell-dots, in the shape of the darkened median area of the forewing and its striking circular pale patch round the cell-dot, and in the position of the 1st line of the hindwing. Abdomen darkened above, with a whitish anterior spot. Nabagulo Forest near Kampala, only the type ♂ known.

13. Genus: **Isoplenia** *Warr.*

Most characters as in *Epicosymbia*. Antenna of the ♀ pectinate, though more shortly than that of the ♂. Hindtibia of the ♂ with 2, of the ♀ with 4 spurs. ♂ genitalia extremely asymmetrical, with aborted uncus, a mappa and one well-developed ceras (the right-hand one). Only one species known.

trisinuata. **I. trisinuata** *Warr.* (6 e). Cell-dots minute or wanting; median line as fine and sharp as the others, much less zigzag than that of *E. nitidata*. Described from Natal, but very widely distributed; Gold Coast, Angola, Nyasaland and Cape Colony are the other localities as yet known to me.

14. Genus: **Isoplenodia** *Prout.*

Probably a development of *Epicosymbia*, similar in shape and coloration, the long pectinations of the ♂ antenna, the double areole of the forewing and shortly stalked subcostal of the hindwing. Distinguished by the very short and slender palpus, the ♀ antenna, which is pectinate but more shortly than that of *Isoplenia*,

and especially — from both *Epicosymbia* and *Isoplenia* — by the hindtibia, which in the ♂ is not only spurless but shortened and broadened, fringed above and with hair-pencil, in the ♀ 2-spurred. Erected for a single Madagascar species.

I. arrogans *Prout* (6 c). In ground-colour like the much larger *E. dentisignata* and *I. trisinuata* (6 e), but with more purplish irroration, which in places (especially on thorax, at base of costa and on the fringes) tends to form a definite suffusion. Vertex and antennal shaft clear white. Cell-dots small but sharply black, median shade much more proximally placed than in the species named; terminal line interrupted. Hindwing beneath, also forewing behind fold, paler. ♀ rather larger (23 mm) and duller. Diego Suarez, March-April (G. Melou), 6 ♂♂ and 1 ♀ in Mus. Tring. — ab. (? sp. div.) **degener** *Prout* from the same source, is less reddish, without purple suffusions, the markings weaker, terminal line obsolete, 2nd subcostal of hindwing scarcely stalked. 1 ♂. taken on 23 August 1917. *arrogans.* *degener.*

15. Genus: **Lissoblemma** *Warr.*

Closely related to *Somatina*, of which it might form a section. Antenna of the ♂ pectinate (as in only a few *Somatina*), forewing with the apex falcate and with the 2nd subcostal arising from the cell. Hindleg of ♂ without spurs, a long pencil from femoro-tibial joint, tarsus short but rather slender. Established for *hamularia* (6 f) and a nearly allied species from S. India.

L. hamularia *Snell.* (= viridifusa *Warr.*) (6 f). Recognizable at once by its shape and markings. Underside pale grey, the forewing suffused with purplish grey and with a broad costal stripe xanthine orange. Distributed from Sierra Leone to Angola. *hamularia.*

16. Genus: **Somatina** *Guen.*

Antenna of ♂ generally with fascicles of cilia, rarely pectinate. Hindtibia of ♂ generally dilated and without spurs, in a few species which are certainly congeneric simple and with a pair of terminal spurs; that of the ♀ with 4 spurs. Forewing with areole nearly always double, the outer small to very small (occasionally lost), the dividing vein arising from the stalk of subcostals 3 to 5 (only in some *subviridata* and *apicipuncta* from the cell); 2nd radial generally from considerably before middle of discocellulars. Venation of hindwing as in *Scopula*. A moderately large and widely distributed genus, chiefly Indo-Australian and African but with offshoots in China and Japan and in America; near *Scopula* but with the areole nearly always double, the pattern usually less simple.

A. Antenna of ♂ pectinate.

S. subviridata *Warr.* (5 i). Somewhat transitional towards *Lissoblemma*, not only in the venation (see above) but in the rather acute apex of the forewing. In addition to the type ♂ from Sierra Leone, unfortunately in poor condition, I know only an imperfect ♂ from Buja, Belgian Congo, and a still more worn ♂ from Sekondi, Gold Coast generally less simple, the ♂ genitalia without the specialisations which constitute *Scopula* such a natural genus. *subviridata.*

S. centrophora *Prout* (5 i) is very similar to *ctenophora*, but the ♂ hindleg has a pair of spurs; forewing slightly narrower, hindwing slightly more convex, both cell-marks with some silvery scaling, as in a *Problepsis*. Cape Colony (type) and Zululand. *centrophora.*

S. ctenophora *Prout* (6 f) in its simple pattern and creamy-white ground-colour somewhat suggests an overgrown *Scopula*. Build very robust, especially in the ♀. Hindtibia of ♂ spurless, though not dilated. Kenya Colony (type), Transvaal and S. W. Africa. *ctenophora.*

B. Antenna of ♂ ciliate; hindtibia of ♂ without spurs.

S. irregularis *Warr.* (6 f). A somewhat anomalous species, with undivided areole but certainly not a *Scopula*. Hindtibia of ♂ strongly tufted. Pattern of forewing very distinctive. Gambia to the Congo, described from Nigeria. *irregularis.*

S. rhodochila *Prout* (5 i). Head and antenna dull red; antennal ciliation as long as diameter of shaft. Forewing rather elongate; venation normal; distinct in its olive-buff and rosy suffusions and coarse black irroration; costal and distal borders pink; cell-mark crescentic; very vague sinuous postmedian and subterminal brownish lines indicated, formed somewhat as in the Indian *purpurascens Moore* or still more oblique costally. Underside dirty whitish, unmarked; costal margin of forewing buff, at extreme edge redder. W. Kivu: south side of middle Lowa Valley, 3500 feet, forest, March 1924, wet season (T. A. Barns), 2 ♂♂ in coll. Joicey. *rhodochila.*

syncorus. **S. syneorus** *Prout* (5 k). A fine species, the ♀ with some approach in colour and markings to *purpurascens Moore* but considerably larger. ♂ less large, scarcely surpassing *impunctulata* (of which *syneorus* may well prove a form), the brownish or fleshy suffusions of the ♀ almost absent. Gaboon (type), Cameroons and Sierra Leone.

impunctulata. **S. impunctulata** *Warr.* (5 k) more resembles a robust, rather thick-lined *Scopula* and was actually described in that genus, but has the double areole. Lines less thick than in *syneorus* ♂, postmedian of forewing less deeply sinuous, of hindwing less angled outward on the 1st radial; terminal line faint, the dots obsolete. Sierra Leone, only the type ♂ known.

chalyboeata. **S. chalyboeata** *Walk.* (5 k). Easily distinguished from *syneorus* ♀ by the curiously curved (anteriorly longitudinal, between the 3rd radial and 2nd median strongly produced) central band. Sexes similar. Described from the Congo, known also from the Ivory Coast and Gambia.

fungifera. **S. fungifera** *Warr.* (5 k). Related to *syneorus* and *chalyboeata* but white, the subterminal lines much less dentate in the middle, the median band nearest like that of *chalyboeata*, but differently shaped and less darkened. Congo: Kassai district.

apicipuncta. **S. apicipuncta** *Prout* (5 k) has the 2nd subcostal of the forewing arising from the cell, but is in all other respects a true *Somatina*. Distal margin of forewing with only 2 black dots, the one in front of the 5th subcostal large, the one behind that vein minute; median line of both wings fine and straight. Gold Coast.

sedata. **S. sedata** *Prout* (6 f). Cleaner white and more shining, recalling a *Bapta* or *Racasta* in its tone. Natal (loc. typ.) and Madagascar.

fraus. **S. fraus** *Prout* (5 k) is another white species, but of a more bluish white than *sedata*; median shade broader and more oblique, postmedian on both wings sinuous. Hindtibia more slender than in *sedata*. Oubangui-Chari-Tchad, only the type ♂ known.

lia. **S. lia** *Prout* (6 f). Known by its fleshy ground-colour and whitish, almost straight lines. Comoro Islands (type) and N. Madagascar.

ioscia. **S. ioscia** *Prout* (5 k). Rather larger and broader-winged than *sedata*, the head and costal edge without any ochreous colour. Wings pale grey with rather strong lilac-grey reflections and with some fine olive-grey irroration. The indistinct olive-grey lines commence from characteristically darkened and oblique costal streaks. Distal areole of forewing extremely small. Matoppas, Bulawayo, only the type ♀ known.

nucleata. **S. nucleata** *Warr.* (6 f). A grey species, distinguished by its ocellated cell-marks — oval dark rings, pupilled with light brown and surrounded with whitish. Sierra Leone (type), Gold Coast, Nigeria and São Thomé.

vestalis. **S. vestalis** *Butl.* (6 g). The curious form of the median band, with a rounded "head" and 2 blackish distal points, like the open beak of a bird, immediately distinguishes this species and the following from all the rest, including even their nearest Indian allies, *omicraria Fb.*, etc. *vestalis* has the ♂ hindtibia non-dilated and with 2 spurs. Distal areole variable, sometimes minute or altogether lost. Described from Natal, but distributed to the Cape, Kavirondo and S. Mozambique.

virginalis. **S. virginalis** *Prout* (6 g). Hindtibia of ♂ strongly dilated, with hair-pencil, the spurs wanting, the tarsus greatly abbreviated. Otherwise hard to distinguish from *vestalis* (6 g); the distal clouding at the radials weak or wanting, hindwing with the discal patch continued (often without narrowing) to the abdominal margin. Congo and Angola to Kenya and Nyasaland and even known from Sierra Leone; the type from Uganda.

mozambica. **S. mozambica** *Th.-Mieg.* Unknown to me, possibly an aberrant form of *vestalis*, but the description does not conform to the Mozambique *vestalis* which I have seen. Expanse 17 mm (tip to tip). "Antenna pectinate." Cell-marks irregularly shaped, a little oval, partly black, partly red-brown, sprinkled with metallic scales, on both wings with a small, round white spot in the centre. A dentate black subterminal line. Forewing in addition with a very small spot on hindmargin. Mozambique: Ibo, 2 ♂♂ (described as a *Problepsis*).

pythiaria. **S. pythiaria** *Guen.* (5 k), founded on 2 ♀♀ from Abyssinia, evidently belongs to the group for which the best known name is *figurata Warr.*, but I have not been able, from Guenée's crude figure, to identify it with any material in our British collections. "Somewhat yellowish white, with 2 parallel, denticulate grey lines and 2 series of subterminal shades, also of a pale grey. Forewing with a subreniform cell-ring formed of raised scales, metallic plumbeous placed on yellowish brown. Hindwing with a constricted reniform discal ocellus, nacreous white with slightly yellowish centre."

probleptica. **S. probleptica** *Prout* (5 l). More *Problepsis*-like in the well-developed, silvery-edged cell-marks, and as the areole is single in the only two examples yet known it seems to be really transitional towards that genus; 5th subcostal arising from the extremity of the areole or scarcely stalked. Hindtibia of ♂ dilated, with yellowish hair-pencil, the tarsus abbreviated. Northern Nigeria, 1 ♂, 1 ♀.

S. figurata *Warr.* (6 g). Variable in ground-colour and especially in the size and development of the discal ocelli, though that of the hindwing is always quite narrow. The typical form has about the brownish-white ground-colour of normal *omicraria Fb.* (India) and seems to be the principal form in Natal (the type locality) and Cape Colony, perhaps also in East Africa and in the Kalahari district. — ab. **rufitacta** *Warr.* has a definite red-brown suffusion, especially on the distal area of the forewing. — **candida** *Prout* (subsp.?) has the ground-colour white, almost as in *vestalis* (6 g). Uganda (loc. typ.) and — perhaps with typical *figurata* — in S. Rhodesia and the Transvaal. — **transfigurata** *Prout*, from Madagascar, has the shading in the terminal area of the forewing weak or obsolete, the cell-mark broader (almost as broad as long), its margins with a heavier admixture of black scales, the hindwing with the cell-mark punctuated with black anteriorly. *figurata. rufitacta. candida. transfigurata.*

S. accraria *Swinh.*, founded on a worn ♀ from Accra, Gold Coast, is perhaps a very weakly marked form of *figurata* (6 g) with the greyish cloudings of the distal area rather strongly developed, the cell-mark apparently small (almost rubbed off, but the lens reveals some brownish scaling). *accraria.*

17. Genus: **Problepsis** *Led.*

A development of *Somatina*, easily distinguished from the typical members of that genus in that the areole of the forewing is single; from the few *Somatina* which have the areole undivided, *Problepsis* can perhaps still be separated by the point of origin of the 5th subcostal, which is generally long-stalked with the 2nd—4th, whereas in *Somatina* it arises from the areole. The ♂ antenna, as in *Somatina*, may be either pectinate or dentate-fasciculate, but the pectinate species are relatively much more numerous and include all the African representatives. The ♂ hindtibia is always spurless. The genus is chiefly Indo-Australian and African, but see Vol. 4, p. 49.

P. ochripicta *Warr.* (8 a). Antennal pectinations long and strong. Differs from the following in its reduced silvery cell-marks and other details; both the subterminal lines are interrupted (macular). São Thomé. *ochripicta.*

P. flavistigma *Swinh.* (8 a) was based on a ♂ from Free Town, Sierra Leone, which we here figure. It is possible that it may prove to be a race of the preceding. — **dilatistigma** *Prout*, from Kenya Colony, is larger, with the distal margin of the hindwing rather more regularly rounded and its cell-mark dilated to above 2 mm in width posteriorly. *flavistigma. dilatistigma.*

P. latonaria *Guen.* (8 b). Founded on a ♀ in very bad condition, with the central markings of the forewing almost entirely effaced and even the distal markings of this wing so indistinct that their course can not be perfectly followed. Face fuscous, lower part white. Antennal ciliation as long as diameter of shaft. Hindwing with the markings apparently about as in *digammata* (8 a), which will very likely have to sink if any anatomical characters are discovered whereby the identity of Guenées type can be definitely determined. "Caffiaria". *latonaria.*

P. rorida *Prout* (8 b). ♂ 39 mm, ♀ 50 mm. Pectinations of the ♂ fairly long, gradually diminishing, to become mere teeth at about the 38th—40th joints. Hindtarsus of ♂ scarcely over ⅓ the length of tibia. Markings weak, the silvery cell-marks without any dark element, that of the forewing narrowly reniform, that of the hindwing expanded posteriorly by means of a proximal projection; median line just distal to cell-mark on forewing, just proximal on hindwing; postmedian complete, dentate. Nyasaland: Mt. Mlanje; formerly misidentified as *latonaria Guen.* *rorida.*

P. aegretta *Feld.* (8 a) differs from *flavistigma* in its less long pectinations, differently shaped cell-marks, that of the forewing with a dark exterior dot on the 2nd radial, in having the median line more proximally placed, etc. Cape Colony (loc. typ.) and Natal. — **insculpta** *Prout* is a larger race from Kenya Colony, with all the markings stronger, the dark outlines of the discal ocellus complete, on its proximal side heavy, recalling those of *meroearia*. Also known from Uganda. *aegretta. insculpta.*

P. meroearia *Saalm.* (8 b). Purer white than *aegretta*, the forewing with enlarged, semilunar cell-mark, brownish postmedian line, shaped nearly as in *digammata* (8 a), and rather strong inner subterminal spots, the outer series, on the other hand, almost obsolete. The pectinations of the ♂ antenna end in fascicles of long cilia and the antenna of the ♀ is also unusually strongly fascicled. Madagascar. — **mayottaria** *Oberth.* (8 b), to judge from the one poor ♂ on which it was founded, only differs in it large size and in having a stronger distal projection of the silvery cell-mark of the hindwing on the 2nd radial and again between the 3rd radial and 2nd median. Mayotte, Comoro Is. *meroearia. mayottaria.*

P. digammata *W. F. Kirb.* (8 a). Antennal pectinations of the ♂ short, surmounted with fascicles of cilia of about the same length. Further differentiable from *aegretta* by the shape of the cell-spot of the forewing, which has a longitudinal buff anterior arm along the 1st radial. The type is from Durban, where it seems to be common, but the species has a wide distribution from Griqualand to Uganda and Kenya and even reappears in Sierra Leone. *digammata.*

similinotata. **P. similinotata** *Prout* (8 a). Extremely like *digammata* but with the pectinations rudimentary, the lower part of the face less clear white (more fuscous-mixed); the cell-mark broader, intermediate in shape towards that of *meroearia*. Upper Congo.

neumanni. **P. neumanni** *Prout* (8 b). Structure and shape nearly as in *similinotata*, the pectinations scarcely so short. Forewing with cell-mark reverting more nearly to the shape of that of *aegretta*, without anterior prolongation; lines fine and weak, the postmedian almost obsolete anteriorly. S. W. Abyssinia: Djiren, Djimma; type ♂ in Mus. Tring.

18. Genus: **Discomiosis** *Prout.*

Antenna of ♂ with 2 pairs of fascicles to each joint, the stronger pair arising from short slender pectinations. Hindtibia of ♂ with strong hair-pencil and sheath (except in *arciocentra*), the spurring irregular; of ♀ with a pair of terminal spurs and one or both of the proximal. Forewing with areole double, the 2nd subcostal arising from the cell, 2nd radial from scarcely before the middle of the discocellulars. Hindwing with 2nd subcostal connate or very shortly stalked with 1st radial. A small African genus, differing from *Somatina* in the point of origin of the 2nd subcostal of the forewing, generally in the structure of the hindleg and of the ♂ antenna, also in the facies.

arciocentra. **D. arciocentra** *Prout* (6 g). Hindtibia of ♂ with proximal and 2 terminal spurs; of ♀ with 4 spurs. Antennal pectinations of ♂ rudimentary, the fascicles strong. Less blackish and more strongly marked than *crescentifera*, for which I at first mistook it. Zululand (type), S. Rhodesia, Natal and Cape Colony.

crescentifera. **D. crescentifera** *Warr.* (5 l), founded on a ♂ from Barotse, has since been found in Ugogo and Rhodesia. The darkest *Discomiosis*. Hindtibia of ♂ with strong pencils and sheath, the terminal spurs rudimentary, the proximal wanting; that of the ♀ with 3 spurs.

anfractilinea. **D. anfractilinea** *Prout* (6 g). Similarly marked to *arciocentra*, recognizable by its extremely zigzag lines; the white spot in front of (or surrounding) the cell-dot of the hindwing somewhat recalls that of *Scopula sagittilinea Warr.* (6 l). Structure closely as in *crescentifera* (5 l), of which it may possibly prove a much paler race, though the hindtibial spurs of the ♂ seem better developed. Kenya Colony.

synnephes. **D. synnephes** *Prout* (6 g), also from Kenya Colony, is more glossy than the other species, with a slightly sandy tone, a rather broad brown median shade on the forewing (sometimes strong, sometimes faint) and very small but generally conspicuous black cell-dots. Hindtibia of both sexes with 3 spurs. Kenya Colony and (a small race?) E. Abyssinia.

19. Genus: **Tricentroscelis** *Prout.*

A development of *Discomiosis*, only differing materially in the strongly protuberant face. ♂ unknown. Hindtibia of ♀ with one proximal and two terminal spurs. Only the type species is known.

protrusifrons. **T. protrusifrons** *Prout* (6 g) recalls a small *D. arciocentra* or *anfractilinea*, though the angulations of the lines are less extreme than in the latter. Founded on a single ♀ from British Somaliland; a few examples have since been received from Gurra and from Kenya Colony.

20. Genus: **Antitrygodes** *Warr.*

This genus, named from its remarkable superficial resemblance to the *Trygodes* of South America — a resemblance presumably induced by a similar protective habit — is evidently another development of *Somatina*, with most of the characters (single areole, etc.) of *Problepsis* but with more or less dentate termen of the hindwing; the areole, moreover, is sometimes lost through non-anastomosis of the 1st subcostal of the forewing. Antenna of ♂ with fascicles of long cilia, which occasionally arise from rudimentary pectinations. Hindtibia of ♂ strongly tufted, without spurs, hindtarsus short; of ♀ with all spurs. Chiefly Indo-Australian, but includes at least 3 African species.

dysmorpha. **A. dysmorpha** *Prout* (5 l). Antenna of ♂ with the fascicles arising from triangular teeth. Wing-shape more extreme than in the other African species, the green median spots of the forewing more confluent into a single, irregular band. N. Nigeria (the type) and Gold Coast.

dentilinea. **A. dentilinea** *Warr.* (6 h). Near the Indian *cuneilinea Walk.* but with a larger cluster of green spots. Postmedian line of both wings beneath as direct as in that species, above — at least in the typical form — with a very pronounced outward angulation between the medians. Antennal fascicles of the ♂ sessile. Sierra Leone (type), Ivory Coast, Nigeria, ?Gaboon, ?Madagascar and the Comoro Islands.

A. acinosa *Prout* (5 l) can scarcely be a form of the preceding, though the structure seems about the same. Forewing with distal margin slightly more sinuous, hindwing with the tooth at the 1st radial rather more acute. Deeper purplish, the green blotches larger, including some partially rounded ones in the distal area. São Thomé, recorded in Tr. Ent. Soc. Lond. 1927, p. 189 as *dentilinea*; type in coll. Joicey. *acinosa.*

A. callibotrys *Prout* (5 l). Antenna of ♂ with short, fascicle-bearing pectinations. Further distinguishable from *dysmorpha* by the shape, from *dentilinea* by the postmedian line, from *acinosa* by the reduction of the green spots. Congo: Upper Kasai River (type); also French Guinea, Uganda and (perhaps a separable race) Madagascar. *callibotrys.*

21. Genus: **Leucoxena** *Warr.*

An offshoot of *Scopula*, characterized by the longer anastomosis of the costal vein of the hindwing with the cell. Antenna of ♂ strongly pectinate, as in some species which we have placed at the head of *Scopula*. Palpus rather strong. Hindleg of ♂ without spurs, but not aborted; of ♀ with 4 spurs. Hindwing relatively long costally, but this can also occur in *Scopula*, e. g. *impersonata Walk.*, from China. Only one species is referred here.

L. lactea *Warr.* (6 g). Easily recognizable by the shape and structure, the narrow brown band which accompanies the postmedian line of the forewing distally, etc. Forewing beneath dark-suffused, especially in the ♂; hindwing less so, but with a postmedian band indicated, much as in the forewing above. Kenya Colony; it has been taken as far north as the Ganale River (Galla). *lactea.*

22. Genus: **Scopula** *Schrank.*

This enormous genus, formerly known by the younger names of *Acidalia Tr.* (preoecupied in the Rhopalocera, according to the dates now accepted for Hübner's "Verzeichniß"), *Craspedia Hb.*, etc., is of almost worldwide distribution and in most respects very uniform in structure. Less robust and with less hairy pectus than *Somatina* and *Problepsis*, the species generally of smaller size and simpler pattern. Palpus moderate or more generally short. Antenna of ♂ generally ciliated, rarely pectinate. Hindtibia of ♂ sometimes with 2 spurs, generally spurless, very often with hair-pencils; of ♀ with 4 spurs. Forewing with areole simple, 2nd radial normal. Hindwing with costal vein anastomosing with cell at a point near base, 2nd subcostal separate, connate or inconsiderably stalked. Genitalia of ♂ with "cerata" and "mappa" (see Vol. 4, p. 51; Pierce, Genit. Brit. Geom. p. XXIV). Larva extremely slender, sometimes almost thread-like. Well represented in all parts of Africa.

A. Section ***Induna*** *Warr.* Antenna of ♂ with long pectinations.

rufisalsa-group.

Hindtibia of ♂ with terminal spurs.

S. rufisalsa *Warr.* (6 h), the type of the section *Induna*, is variable in size and in the strength of the markings but may readily be known by its shape (apex of forewing rather sharp, termen markedly oblique) and its finely crenulate postmedian line. Underside marked almost like upper. The name-typical race has a decided suffusion of pale pinkish buff or vinaceous buff. Described from Natal but extends northward to S. Rhodesia and southward to Griqualand. — **pallidisalsa** *Prout* is paler, even the most brownish specimens showing a less warm (less buff) tone and generally has the median line of the hindwing placed outside, instead of crossing, the cell-dot. Kenya Colony, the type from Mt. Kenya, 3300—3500 m. (Alluaud and Jeannel), in Mus. Paris. Also from Tanganyika Territory. Whether the form from N. E. Rhodesia recorded by Hampson as *rufisalsa* belongs here or to another race, I have no means of knowing. *rufisalsa.* *pallidisalsa.*

S. palpifera *Prout* (6 h) is very similar, especially in shape, to *rufisalsa* but white and very weakly marked, especially above. The palpus appears somewhat stronger, but it is not inconceivable that it may be a remarkable race of the same species, though the only known ♂ has unfortunately lost its hindlegs. S. W. Africa. *palpifera.*

S. palleuca *Prout* (6 h). Considerably smaller and relatively a little less long-winged than *palpifera*, the face white (in both the preceding species light brown), cell-dots present, that of the forewing conspicuous fairly large. S. W. Africa also N'Gami. A ♂ form which I believe to belong with it (taken with the type) has forewing and face more tinged with brown, but is still differentiable by the other characters. *palleuca.*

curvimargo-group.

Hindtibia of ♂ slender, but without spurs.

monotropa. **S. monotropa** *Prout* (6 h). This and the two following species, which will in all probability be found to belong to the same group, although their ♂♂ are unfortunately not yet known, have similarly smooth and not very strongly convex margin of the hindwing to that of *palleuca*. The ♂ of *monotropa* is indeed very similar to the most brown-tinted form of that species, except in the absence of the hindtibial spurs; costa of forewing slightly more elongate, cell perhaps slightly less elongate. The face is perhaps not quite so flat, the ♂♂ are more brownish-tinged than those of *palleuca*, with stronger lines, including one on the hindwing, and have the proximal spurs of the hindtibia placed at less than ¾ — in *palleuca* at just beyond ¾. S. W. Africa.

phyletis. **S. phyletis** *Prout* (6 h) differs from *monotropa* — which may, however, prove to be a form of the same species — in its more violet-grey forewing, with stronger subterminal shading, weaker terminal line, hindwing with more lines and underside more suffused. Transvaal, 3 ♀♀ known.

molaris. **S. molaris** *Prout*, from S. Rhodesia, is possibly another ♀-form of *phyletis* (6 h), rather larger, possibly longer-winged, less pale (especially on underside), but with head, face and front of thorax whiter; cell-dot minuter.

pelloniodes. **S. pelloniodes** *Prout*. Not altogether dissimilar in build to the 3 preceding but a little larger (25 mm), the forewing fawn-colour, the hindwing appreciably more ochreous tinged, the coloration recalling the Indian *Rhodostrophia inconspicua Btlr.*, though a little duller. Forewing with sharp black cell-dot, median shade just beyond it, little thickened, postmedian line slender, slightly sinuous, a shade present on proximal side of the subterminal. Hindwing with the line and shades feebly continued. Underside slightly more ochreous, with cell-dot and postmedian line indicated. Orange Free State: Harrismith, 1 ♂.

curvimargo. **S. curvimargo** *Warr.* (6 h) differs essentially from all the preceding in the more convex margin of the hindwing, with angle at the 3rd radial; this and its fine lines, with brown spots outside the postmedian of the forewing, suggest that it might be a pectinate relative of *sanguinisecta Warr.* and *penricei Prout* (7 b). N. Rhodesia (type) and Nyasaland to S. Rhodesia and perhaps the Transvaal; similar forms also in Kordofan, Kenya Colony and on Kilimandjaro.

bilineata. **S. bilineata** *Bastelb.* (= nubicincta *Hmps.* (8 e) is like a fleshy-coloured *curvimargo* (6 h) and it is not quite certain that it may not be a colour-form of it. Bastelberger, mistaking the affinities, proposed for it a new genus *Psilephyra*. Nyasa, N. E. Rhodesia and Tanganyika Territory.

albida-group.

Hindtibia of ♂ dilated, without spurs.

albida. **S. albida** *Warr.* (6 i). Similar to *curvimargo* but with the angle of the hindwing blunter; less definite brown marks outside the postmedian of the forewing, that of the hindwing less bent in the middle, etc. Variable in colour (white or more brownish) and in the strength of the markings. — ab. **pura** *Swinh.* is weakly marked, but scarcely deserves a separate name. — Both the types were from Uganda, but the distribution is wide in W. Africa, from Sierra Leone to Angola.

B. Section ***Pylarge*** *Warr.* Antenna of ♂ ciliated; hindtibia of ♂ with terminal spurs.

picta. **S. picta** *Warr.* is a glossy white species, easily known in its more typical forms by the bright dentate zinc-orange postmedian line of the forewing. It is, however, extremely variable, unless (as Warren supposed) we are dealing with two closely allied species. 2nd subcostal of hindwing often more definitely stalked than is usual in *Scopula*. The actual type was an almost unique form, with the distal area of the forewing pure white. — ab. **fulvilinea** *Warr.* (6 i) designates the more usual forms, more or less suffused with grey shading which is generally band-like in the distal half and sometimes — especially in the ♀♀ — obscures the orange line. Transvaal to Kalahari and the Cape, the type from Natal.

fulvilinea.

impicta. **S. impicta** *Prout* (6 i). Less white, less banded, except for the proximal subterminal shade of the forewing; lines fine, generally rather weak, the postmedian not bright brown, the white hindwing with a black cell-dot. Transvaal (loc. typ.), Basutoland and Cape Colony.

flexio. **S. flexio** *Prout* (6 i). ♂ unknown, the subgeneric position consequently uncertain. Rather larger and longer-winged than the three preceding, the forewing more brownish, with the postmedian and the pure white line outside it flexuous, the hindwing less white than in them, with traces of brownish lines. Cape: Dunbrody, a few ♀♀.

S. gazellaria *Wllgrn.* (= obliquiscripta *Warr.*) (6 i). Distinguishable at a glance from *impicta* and its nearest allies by the strongly marked hindwing, which continues the pattern of the forewing. I have not seen Wallengren's type from "Caffraria" and cannot be quite sure that the synonymy is correct, as the three following species are very similar. Natal and the Transvaal. *gazellaria.*

S. promethes *Prout* (6 i). Fascicles of cilia less long than in *gazellaria*, forewing with apex rather less acute, median line more distally placed, proximal subterminal shade not thickened. From both *gazellaria* and *subobliquata* it differs in having the hindwing appreciably, though very feebly, bent at the 3rd radial, the wings rather more glossy (less densely irrorated than in *subobliquata*) (5 l), the postmedian line of both wings slightly more sinuous. Basutoland (type), Transvaal and Cape Colony. *promethes.*

S. sevandaria *Swinh.* is, I strongly suspect, merely the ♀, or a ♀-ab., of the following and has page-priority. Smaller, more strongly marked, the median line more oblique, closely approaching the postmedian towards costa. Kenya Colony: E. Quaso, Masai, 1 ♀. *sevandaria.*

S. peararia *Swinh.* (5 l). A little narrower-winged than *promethes*, more tinged with drab-grey, more irrorated, postmedian line more accentuated on the veins, median line of hindwing proximal to the cell-dot. Kikuyu Country. *peararia.*

S. acyma *Prout* (8 l). Rather larger than *peararia*, slightly more elongate but with costal margin of forewing slightly more rounded, colour different (pale pinkish buff to light pinkish cinnamon, the anterior part of the hindwing whiter), median line rather less firm, rather widely separated from antemedian. Antennal ciliation even, about as long as diameter of shaft. Kenya Colony (Mau Escarpment): Molo, 2420 m., 2 ♂♂. *acyma.*

S. technessa *Prout.* Again rather larger (31 mm), the antennal ciliation in extremely long fascicles. Forewing with apex acute, minutely produced, termen prominent in middle, hindwing with costa rather long, termen with a strong tooth at 3rd radial. Coloration slightly more buff than in *peararia*; postmedian series of vein-dots on forewing bent at 1st radial, then nearly parallel with distal margin, slightly sinuous. Lines of hindwing becoming thicker and more blackish at abdominal margin. Mt. Aberdare: Mt. Kinangop, 2500—3000 m, 1 ♂. The unique type is unfortunately rubbed, but easily recognizable by shape and structure. *technessa.*

S. subobliquata *Prout* (5 l). Of this species I only know the type ♀; thus its reference to the section *Pylarge* is only conjectural, based on its resemblance to *promethes* and *peararia*; whiter than both; irroration blacker than in *peararia*, but not quite so copious, postmedian of forewing exactly parallel with termen, browner (less grey), black dotted on the veins. Haenertsburg, Transvaal. *subobliquata.*

S. punctilineata *Warr.* (6 i). Variable in colour but unmistakable in shape, in the thick and oblique median shade, postmedian-dotted on the veins, etc. The type has the ground-colour white, the median shade brown. — ab. **griseolineata** *Warr.* has the ground-colour more tinged with brown, the median shade mixed with black-grey. — ab. **fuscata** *ab. nov.* is infuscated throughout, the median line still remaining the strongest marking. — The species ranges from Transvaal to Cape Colony, the type from Natal. *punctilineata. griseolineata. fuscata.*

S. concurrens *Warr.* (6 i). Unlike any other known species of the section *Pylarge*, more resembling *erinaria* (6 m), *deserta* (7 a) or *dissonans* (7 a). With care it can be distinguished, apart from the ♂ structure, by the extremely oblique pose of the markings, which results in making the median shade of the hindwing appear as a continuation of the 1st subterminal shade of the forewing. N. E. Rhodesia; Loangwa River, only a few examples known. A rather broad-winged, but otherwise similar ♀ from Bahr-el-Ghazal (the median shade of the hindwing just p r o x i m a l to the cell-dot) and two larger, less fleshy-tinted, more heavily dark-dusted ♀♀ from Nairobi (median shade of hindwing just d i s t a l to the cell-dot) probably represent races. *concurrens*

S. donovani *Dist.* (= extraordinaria *Stgr.*, extremata *Warr.*) (6 i) represents in Africa and Syria the subsection *Lycauges Btlr.*, distinguished by its extremely elongate wings. See Vol. 4, p. 54. Known from Morocco, Egypt, Nigeria, Uganda, Barotseland, Transvaal and Natal, the type being from the Transvaal. From Madagascar I have seen only a small specimen which seems nearer to the Indian *emissaria Walk.* (= *defamataria Walk.*). *donovani.*

S. dapharia *Swinh.* (6 k). Also very long-winged, but with the hindwing better rounded than in *donovani*, paler and with less markings than the forewing, the latter with a redder tint. Kenya Colony. especially about Nairobi. *dapharia.*

S. ruficolor *Prout.* Very near *irrufata* (6 k), with equally long antennal ciliation. Larger (25 mm) forewing longer and narrower, with more oblique termen, hindwing with more sinuous termen, colour brighter rufous, much less densely irrorated, lines more distinct, underside less unicolorous. Johannesburg. *ruficolor.*

S. irrufata *Warr.* (6 k). Scheme of markings as in the variable *nigrinotata* (6 l), which lacks the spurs of the ♂ hindtibia. More reddish than in any known form of that, the lines not forming enlarged black spots at the costa. Cape Colony. *irrufata.*

nephetoperas. **S. nepheloperas** *Prout* (6 k) somewhat recalls some *Glossotrophia* or the Palaearctic *S. submutata Tr.* (Vol. 4, pl. 4 i). On an average smaller than the last-mentioned, more ochreous or sandy, antennal ciliation in both sexes longer, face pale in lower half, etc. Described from British Somaliland, since received from Abyssinia and Asben.

ocellicincta. **S. ocellicincta** *Warr.* (5 f). Distinct in the ringed cell-dots and the dark spots of the subterminal area. Only known from 2♂♂, both from Athi ya Mawe, Kenya Colony.

anoïsta. **S. anoïsta** *Prout* (5 f). Nearly as broad-winged as *plionocentra* but very differently marked, the forewing having an orange-cinnamon spot at the tornus and weaker indications of a subterminal one between the radials. Forewing beneath well marked, hindwing beneath plain whitish. Ja River, S. Cameroons.

candidaria. **S. candidaria** *Warr.* (6 k). Conspicuously distinct in its group, relatively large, white, with dentate markings. Forewings beneath strongly smoky. Kikuyu Escarpment.

plionocentra. **S. plionocentra** *Prout* (6 k). An obscure little species but scarcely variable. Apart from its spurred ♂ hindtibia it can be distinguished from the mass of similarly coloured species which we place at the end of *Scopula* by its very zigzag, punctiform outer line, placed on a narrow shadowy basal or thick line and apparently representing on the forewing a combination of the postmedian with the first subterminal shade. Nigeria (loc. typ.) to Gaboon and Uganda.

minoa. **S. minoa** *Prout* (6 k) differs from all the rest by the entire absence of markings. Build rather robust. Wings strongly glossy, of a rather characteristic colour-tone. Face not darker than the rest of the head and body. Somaliland (type), Abyssinia and Kenya Colony.

C. Section ***Scopula.*** Antenna of ♂ ciliated (very rarely with short pectinations); hindtibia of ♂ without spurs.

ectopostigma. **S. ectopostigma** *Prout* (5 f). Face black. Antennal joints slightly projecting, ciliation scarcely over 1. Collar buff. Hindtibia fringed with coarse scaling above and tufted at extremity, tarsus almost as long as tibia. Forewing with cell noticeably over ½; irroration not strong; the light brown lines rather weak. Hindwing with cell fully ½. Underside with cell-dot and traces of the lines beyond, forewing with smoky suffusion in cell. Fernando Po, 3000—4000 feet, 1 ♂, somewhat wasted but easily recognizable.

longitarsata. **S. longitarsata** *Prout* (6 k). ♂ with antennal joints projecting, the fascicles of cilia somewhat longer than diameter of shaft; hindtibia slender, of about the same length as femur, tarsus markedly longer. In shape and coloration reminiscent of a miniature *virgulata Schiff.* (Vol. 4, pl. 4 k), but with sharper cell-dots, median and postmedian lines of forewing curved near costa, these lines on hindwing more proximally placed, terminal line more broken into dashes, hindwing beneath with postmedian much more distal than above. Kenya Colony: Kibwezi.

insincera. **S. insincera** *Prout* (8 l). Very similar to *sincera Warr.*, but with the ♂ hindtibia short and slender, the tarsus longer than the tibia. Wings less clear white on both surfaces, especially on the forewing beneath, first line farther from the base and more oblique, black terminal dots wanting. Transvaal (type) and Transkei.

sinuaria. **S. sinuaria** *Swinh.* (6 k). Both wings with postmedian line very distal, sinuous (possibly Swinhoe intended to write "*sinuaria*"), median on the forewing clear, similarly formed; terminal markings very characteristic, the very fine black terminal line being continued round the apex and finely edged proximally and distally with white, as in *nepheloperas* (6 k) and the European *submutata*. Hindtarsus of ♂ not abbreviated. Kenya Colony. —
bisinuata. **bisinuata** *Warr.* is generally browner, but some examples differ little from the greyish name-type. Angola (loc. typ.) and from Nyasaland to the Cape.

acentra. **S. acentra** *Warr.* (8 b) resembles a giant *nigrinotata*, rather evenly irrorated and without enlarged costal spots on the forewing. Structure similar, but the ♂ hindtibia less thickened. "South Africa" (Natal). Also known from the Transvaal.

nigrinotata. **S. nigrinotata** *Warr.* (6 l). Extremely variable in colour, no doubt — as with its Palaearctic relatives, the *marginepunctata*-group — adaptive to the soil on which it occurs. Hindtibia of ♂ thickened, tarsus at least as long as tibia. Forewing with black or dark costal spots at the beginning of the lines, including a subbasal. The name-typical form, described from Nyasaland, is dirty white, more of less strongly irrorated with
uniformis. blackish, giving rise to innumerable subordinate variations. — ab. **uniformis** *Prout* is almost uniformly dusted with dark grey, closely like the Indian *cleoraria Walk.*, except in the less white subterminal spots; markings,
argillacea. in consequence, much weakened, even the costal spots not conspicuous. — ab. **argillacea** *Prout* denotes the more clay-tinted, or cinnamon-buff forms, which seem rather prevalent about Cape Town and in other parts of Cape Colony. — *S. nigrinotata* is known from Sierra Leone, Nigeria, Abyssinia, E. Africa and Nyasaland (chiefly in the whiter forms) and Rhodesia to the Cape (largely in more suffused or more brownish forms).

S. beccarii *Prout* (6 l). ♂ unknown, but will probably show nearly the structure of *acentra* (8 b) or *marginepunctata* (Vol. 4, p. 63, pl. 4 h). Very similar to the latter, but with the forewing a little narrower, its distal margin rather more oblique, hindwing less convex; median shade little thickened, subterminal rather less expanded between the radials, the spots on its proximal side strong. Eritrea. *beccarii.*

S. timia *Prout* (8 e). A small species, known by its whitish ground-colour, weak sandy markings and absence of dark irroration. ♂ unknown, but I assume related to *beckeraria Led.* (Vol. 4, p. 62, pl. 7 b), though the wings are rather narrower and still paler. Cloudy spots in the distal area may be present or almost obsolete. British Somaliland. *timia.*

S. nephotropa *Prout* is possibly a form of *timia* (8 e), but more probably distinct, as the forewing has a fine irroration, in part dark grey, giving to the wing a slightly more smoky tone; its distal margin perhaps slightly more oblique, its (faintly indicated) subterminal line apparently much straighter, terminal dark dots or dashes present (in *timia* merely a weak sandy line). Sugli, Al Hills, 4700 feet, in the east of British Somaliland, only the type ♀ known. *nephotropa.*

S. pyrrhochra *Prout* (8 f). Also conceivably a remarkable colour-form of *timia*, together with which it occurs at Mandera (47 miles S. W. of Berbera), unconnected by transitions. Light ochraceous buff, suffused with deeper ochraceous buff and with a greyish band (sometimes very faint) bounding the subterminal proximally. ♂ unknown. *pyrrhochra.*

S. rhodinaria *Rbl.*, from Socotra, was founded on a single ♀, but probably belongs about here. Length of a forewing 11,5 mm. The ochre-yellow ground-colour is strongly covered with rose-red irroration, recalling *Sterrha* (*Ptychopoda*) *eugeniata Mill.* (Vol. 4, p. 121, pl. 4 e) but the hindwing is rounded and the black terminal dots are on the distal margins, not on the base of the fringes. The hindleg and the venation of the hindwing prove it to be a *Scopula*. Can it be an aberration of the following? *rhodinaria.*

S. fulvicolor *Hmpsn.* (8 c), also from Socotra, is somewhat variable but always of a warm ochreous or rufescent tone, rather broad-winged, with large black cell-dot (or dash) on forewing and exceptionally elongate cell-mark on hindwing. ♂ with antennal ciliation moderate, hindtibia rather slender, tarsus long. *fulvicolor.*

S. simplificata *Prout* (8 c). Near *fulvicolor*, scarcely so broad-winged, much paler, the postmedian line not appreciably sinuate inward, scarcely blackened on the veins. Face brown. Ogaden: Ganale River. *simplificata.*

S. separata *Walk* (8 c). Variable in colour, but nearly always easy to recognize by the narrow, irregular band between the postmedian and subterminal. ♂ ciliation long, hindtibia slender, tarsus long. — ab. **atlantica** *Walk.* is a grey form with heavy lines but without the band-like distal shading. — Island of St. Helena. *separata.* *atlantica.*

S. inscriptata *Walk.* (= acentra *Warr.* nom. praeocc.) (6 l) differs from *nigrinotata* (6 l), which SWINHOE quite wrongly sank to it, in its sharp alternations of white and dark brown, large cell-dots, extremely deep inward bend of the white subterminal of the hindwing between the radials, etc. Underside similar to upper (in *nigrinotata* very weakly marked). "S. Africa" (Cape Colony) and reaching the Transvaal. *inscriptata.*

S. sagittilinea *Warr.* (6 l). Smaller than *accentuata*, ♂ hindtarsus fully as long as tibia, hindwing not crenulate, ground-colour slightly more reddish brown, no dark blotch between the radials outside the postmedian, underside paler with the postmedian rather less dentate. Somaliland to the coast of Tanganyika Territory, described from Mombasa I. *sagittilinea.*

S. duplicipuncta *Prout* differs from *accentuata* (6 l) in having the postmedian line nearer the termen, especially on hindwing, median shade of hindwing almost encircling cell-spot. Perhaps only an aberrant form of it. I do not know the ♂. Pretoria. *duplicipuncta.*

S. accentuata *Guen.* (= exiguaria *Walk.*, accenturiata *Walk.*) (6 l). At first glance suggestive of some forms of *acentra* or *nigrinotata*, though with a more olivaceous tinge. Hindtarsus of ♂ about, or scarcely, as long as tibia. Hindwing more crenulate. Postmedian line and proximal subterminal shade of forewing dark-marked between the radials; hindwing generally showing a white dot in front of the cell-dot, as in *Discomiosis*. Cape to Kenya Colony. — **rudisaria** *Walk.* (= dentigerata *Walk.*) is almost certainly a mere aberration, less irrorated, the postmedian line perhaps more strongly inbent between the radials, with more *nigrinotata*-like expansion of the subterminal shade. Cape of Good Hope. *accentuata.* *rudisaria.*

S. cassiaria *Swinh.* (6 l). Closely related to *accentuata*, but I think distinct. Antennal ciliation of ♂ a little longer (about 2). Hindtarsus of ♂ longer than tibia. Wing-margins slightly more dentate; median shade of forewing, from its angle at R^1 hindward, almost s t r a i g h t , firm. Kenya Colony: E. Quaso, Masai. Also received from Uganda. *cassiaria.*

S. cassioides *Prout* (6 m). Probably not really as near to *cassiaria* as it looks. ♂ with ciliation shorter, hindtarsus only about $^2/_3$ tibia. Rather more brownish than *cassiaria*, median shade of forewing arrising from *cassioides.*

a blacker costal spot, then weaker, much more angled outward at 1st radial, postmedian also more bent anteriorly, hindwing beneath less strongly marked. Kenya: Kibwezi and Mombasa.

recurvinota. **S. recurvinota** *Warr.* (8 c). Position in the genus doubtful. Whiter than the preceding, wings rather narrower, the hindwing more angled, the punctiform postmedian on the forewing angled outward on 1st radial; characterized by the strong black postmedian spot at hindmargin of each wing. Kikuyu Escarpment, the unique type ♀ not very fresh.

subpectinata. **S. subpectinata** *Prout* (6 m). Teeth of ♂ antenna developed into rudimentary pectinations, from which arise the long fascicles of cilia. Further distinguished by the fleshy ground-colour and the large black cell-dot of the hindwing. Hindtibia of ♂ dilated, tarsus about as long as tibia. Described from Uganda, but now known also from Oubangui-Chari-Tchad, Cameroons and Uelle district (N. E. Belgian Congo).

umbratilinea. **S. umbratilinea** *Warr.* Probably very near *subpectinata* (6 m) but rather larger, duller-coloured, forewing with distal margin rather more sinuous, median line and its accompanying shade dark, almost confluent, apical dash and dark postmedian spots between the radials undeveloped. Kilimandjaro, only a few ♀♀ known.

opicata. **S. opicata** *Fb.* (= infantularia *Guen.*, vanaria *Walk.*) (6 m). Unlike any other *Scopula*, mistakenly supposed by Guenée to belong to the South American genus *Pigia*. Hindtibia of ♂ moderately dilated, tarsus slightly abbreviated. First described from India, it has proved to have an exceptionally wide distribution from W. Africa to New Guinea. I have seen African examples from Sierra Leone to Angola, Uganda, Nyasa, Tanganyika and Zanzibar.

euphemia. **S. euphemia** *Prout* (6 m). Structure much as in *opicata*. Also whitish, but with little further resemblance. May be recognized by its rather narrow wings, thick brown lines, the median of the forewing highly oblique, and sharp black cell-dot. S. Nigeria.

mesophaena. **S. mesophaena** *Prout* (6 m) is another small species, differing structurally in the appreciably longer antennal ciliation, slender hindtibia and long hindtarsus of the ♂, and superficially in its smaller cell-dots and much stronger lines, especially the oblique median, postmedian of hindwing anteriorly curved, etc. Kenya Colony (type locality Kibwezi) and Tanganyika Territory.

commaria. **S. commaria** *Swinh.* (8 d) may be the ♀ of *fragilis*, rather narrower-winged, more robust, with the oblique line and the postmedian of the forewing somewhat differently placed, the former thicker. Kikuyu Escarpment.

fragilis. **S. fragilis** *Warr.* (6 m). Slenderly built, the anteriorly elongate hindwing in its anterior part white and unmarked, antennal ciliation moderately long, hindtibia slender, tarsus rather longer than tibia. Kikuyu Escarpment and the Aberdare Range.

silonaria. **S. silonaria** *Guen.* (= sticticata *Warr.*) (6 m). Recognizable at a glance by its shape. Hindwing above paler und with less markings than forewing, underside in part reversing these conditions; reminiscent of *Rhodostrophia pelloniaria Guen.* (from India), next to which Guenée placed it. Hindleg of ♂ slender, with tarsus rather long. Abyssinia (type), Kenya Colony, Uganda and N. E. Congo.

erinaria. **S. erinaria** *Swinh.* (6 m) and most of the species which follow (as far as *fuscobrunnea*) have the face brown (like *silonaria*) instead of the black which is so general in the genus, but have a normal *Scopula* shape and facies. In typical *erinaria*, from Kenya Colony, the median shade of the forewing is thick, close to the *isolata.* postmedian. — **isolata** *Prout*, from Cape Colony and Basutoland, has the median line slender, passing midway between cell-dot and postmedian, the shade outside the postmedian rather strong.

erymna. **S. erymna** *Prout* (8 d) is probably near *bigeminata*, notwithstanding the very different course of the lines, but the ♂ remains unknown. The brown face is mixed with black. E. Abyssinia.

bigeminata. rufifimbria. **S. bigeminata** *Warr.* (7 a). Rather variable in colour, but otherwise pretty stable. The very oblique d o u b l e line which crosses both wings is unmistakable. — **rufifimbria** *Warr.* is an aberration with a reddish tinge, especially on the fringe. — Cameroons, Angola, Uganda, Sudan, Abyssinia, Kenya, Transvaal, Natal and Cape.

alma. **S. alma** *Prout* (7 a). Face black. Somewhat recalls, except in size, the Palaearctic *emutaria Hb.* (Vol. 4, p. 75. pl. 41), but the hindwing is not tailed, only very slightly bent at 3rd radial; lines more brownish than in that species. Hindtibia of ♂ dilated, with long hair-pencil, tarsus almost as long as tibia. Nairobi.

deserta. **S. deserta** *Warr.* (7 a). Variable in colour, but with warmer shades than *erinaria*, the fringe suffused with reddish or darkened; median shade further removed from the dotted postmedian line than even in *erinaria isolata.* Transvaal to Cape Colony, described from Natal.

dissonans. **S. dissonans** *Warr.* (7 a). Wings rather broader than in *deserta*, colour paler, median shade and the one just outside the postmedian thick, antenna of ♂ with stronger fascicles of cilia. From *erinaria* it can

readily be distinguished by the very mueh stronger median shade of the forewing, as well as the less white ground-colour. Natal (type) and to Nyasaland and Kenya.

S. supina *Prout* (7 a). Recognizable by its broader forewing, with aeute apex and smooth termen, and extraordinarily oblique postmedian line, accompanied by vein-dashes whieh almost reach the termen at the 1st radial. The red-brown face more or less suffused with blackish. Ivory Coast, Nigeria, N. E. Congo, Uganda (loe. typ.) and Nyasaland. *supina.*

S. natalica *Butl.* (7 a) differs from all the preeeding speeies in the more angled hindwing and from most of them in the more sinuous and less oblique postmedian line; in both these respects it reverts towards the faeies of *curvimargo* (6 h), *bilineata* and *albida* (6 i) in Seetion A. Very variable; two forms besides the type have reeeived names. — ab. **obliterata** *Warr.* is a dull form with the lines obsolete, the cell-dots and faint subterminal clouding remaining. — ab. **diffusizona** *Hmpsn.* has a rather strong, diffused fuseous-brown band outside the postmedian. — Found almost throughout the Aethiopian Region, from Sierra Leone and the Sudan to the Cape. *natalica.* *obliterata.* *diffusizona.*

S. rubriceps *Warr.* (8 d). Nearly related to *natalica* but distinguished by the dotted postmedian line and the terminal dashes in place of mere dots. Angola. *rubriceps.*

S. jejuna *Prout* (7 a) seems to connect *deserta* and *dissonans* (7 a) with *bistrigata* (7 b) but is narrower-winged than the two latter, the hindwing somewhat more angled than in *deserta*. Cell-dots minute; forewing marked almost as in weakly-marked *deserta*, the fringe pale; hindwing with the postmedian line and subterminal shades bent or eurved at the 1st radial. Face brown, not very dark. Only 2 examples are yet known, the type ♀ from Ogruga, S. Nigeria, another ♀ from Joko, Cameroons, both in Mus. Tring. *jejuna.*

S. bistrigata *Pagenst.* (7 b) was described as a *Timandra*, but antenna, legs and venation show it a typieal *Scopula*; ♂ hindtibia dilated, with hair-peneil, tarsus as long as tibia. Apparently rather variable in colour, the type pale reddish yellow. Madagascar, deseribed from the south-east; Comoro Islands. *bistrigata.*

S. rhodocraspeda *Prout* (8 d). Possibly a form of the preeeding, comparison difficult, as the only ♂ *bistrigata* yet known to me (Diego Suarez, 31 August) is very worn; central shade obsolete above, as also the distal markings, which in *bistrigata* apparently connect the postmedian line of forewing with the apex. Mustard-yellow to apricot-yellow, the costal edge of the forewing rosy, also the fringes. Forewing beneath suffused with testaceous, only the hindmargin remaining pale. Madagasear: Betsileo (Hidebrandt), 2 ♂♂; Diego Suarez, 2 ♂♂. *rhodocraspeda.*

S. fuscobrunnea *Warr.* (♀ = fuscifusa *Prout*) (7 a, b). Shorter-winged than *natalica*, the ♂ infuscated throughout, the ♀ only in part: Neither sex is variable and the strong sexual dimorphism — so unusual in this genus — misted me into describing the ♀ as a new species. Uganda (type locality of *fuscobrunnea*) and the Cameroons (type loeality of *fuscifusca*). *fuscobrunnea.*

S. hectata *Guen.* Of this species I have no material, though one or two examples which are probably referable to it have passed through my hands. Near *fuscobrunnea* (7 a, b) in shape and structure, the "pale testaceons grey or bone-colour" of the wings giving plaee to a more sombre shade in the distal area, traversed by a somewhat macular subterminal of the ground-eolour; lines fine, dentate; cell-dots black. Face blaek. Hindtibia of ♂ hardly dilated. Cape. *hectata.*

S. haemaleata *Warr.* (7 b). Rather broad-winged and *Somatina*-like. Hindtibia of ♂ with strong hair-pencil, tarsus nearly as long as tibia. The shape, the dull purple head and margins, brighter purple-red fringe, terminal spots of forewing and (generally) posterior thiekening of median shade unmistakable. Sierra Leone to Gaboon, the type from Nigeria. *haemaleata.*

S. omnisoma *Prout* (8 d). A pretty little species, in some lights with a very pale "quaker-drab" gloss, the terminal line dark, a eharaeteristic spot (proximally fuscous, distally more reddish) at hindmargin of forewing. ♂ hindtibia strongly dilated, tarsus somewhat abbreviated. Underside very weakly marked, the forewing, exeept at hindmargin, suffused with reddish. Madagascar: Tananarivo, only the type known. Scareely a remarkable aberration of the following? *omnisoma.*

S. rubrosignaria *Mab.* (= minuta *Warr.*) (8 d). Shape, strueture and essential markings elosely as in the preceding. Paler, without the blotches, but with some fuscous shading preceding the darker terminal line; fringes rosy. Madagasear. Warren's "*Haemalea minuta*", founded on a specimen acquired by auetion and erroneously localised as from "S. Ameriea", was fortunately published 2 months later than Mabille's *rubrosignaria*. *rubrosignaria.*

S. leucoloma *Prout* (8 e). Close to *rubrosignaria*, hindtarsus apparently a little shorter, wings slightly more rounded. Both, excepting the distal margins and parts of the other margins, strongly suffused with somewhat pinkish cinnamon; forewing with antemedian line more angled than in *rubrosignaria*, both wings with a strongly developed subterminal. Betsileo. *leucoloma.*

caesaria. **S. caesaria** *Walk.* (= obturbata *Walk.*, perfectaria *Walk.*, faeculentaria *Mab.*, rufimixtaria *Warr.*, caesarea *Fuchs*) (7 b). As widely distributed as *opicata* but more variable; generally, however, very easy to recognize by the vinaceous, grey-clouded distal area, which on the forewing anteriorly narrows to the apex, nearly as in *fuscobrunnea* ♀; fringes clearer vinaceous. ♂ hindtibia somewhat dilated, tarsus a little shorter. *defecta.* Hindwing rounded. — ab. **defecta** *ab. nov.* almost entirely lacks the characteristic borders, but may still be known by the pinkish fringes. — African localities known to me are Gambia, Nigeria, Congo, Nyasaland, Tanganyika Territory to Cape Colony, Comoro Is., Madagascar. Eastward it reaches New Guinea and Australia.

atramentaria. **S. atramentaria** *Bastelb.* (6 h) is characterized by the extremely dark markings of the distal are a and the black-ringed and black-tipped abdomen. The type ♂, from Kidugala, Tanganyika Territory, remains unique; but see the following.

penricei. **S. penricei** *Prout* (7 b) may, I suspect, prove to be a race or the normal form of the species which Bastelberger earlier described as *atramentaria*. Markings of abdomen and of distal area much less extremely dark. From *sanguinisecta* it differs in the red-brown face and palpus, slightly more irregular shape, browner lines, different anterior maculation of subterminal area and dark-dotted fringe. Angola (type) and N. Rhodesia.

sanguinisecta. **S. sanguinisecta** *Warr.* (7 b). Face black. Hindtibia dilated with hair-pencil, tarsus about as long as tibia. On the differentiation from *penricei* see above. ♀ more greyish, especially in distal area, the spots *muscosaria.* weak or nearly obsolete. Cape Colony to Kenya, the type from Natal. — ab. **muscosaria** *Warr.* is a large ♀ from the Kikuyu Escarpment with unusually heavy dark irroration. Should the variable East African *subcatenata.* forms prove to constitute a race, this name must be applied to it. — **subcatenata** *Prout* (? sp. div.) (7 b). More flesh-coloured, median line strongly incurved at fold, subterminal spots more numerous, though commonly weaker or anteriorly smaller, in the ♀ generally forming a complete chain. Madagascar: Diego Suarez. *albida.* — ab. **albida** *Prout* has the ground-colour whitish; taken among typical *subcatenata*.

batesi. **S. batesi** *Prout* (8 e). Closely like a large, pale, weak-marked *sanguinisecta*, the postmedian of the forewing slightly more sinuous, the hindtarsus only about ⅔ as long as the hindtibia. Cameroons. Gendern, 4600 feet, only the type ♂ known.

tenuiscripta. **S. tenuiscripta** *Prout* (7 c), from Barberton, Transvaal, may be a near relative of *sanguinisecta*, without the maculation of the distal area. But if the antenna (unfortunately lost in the ♂ type) were pectinate it might prove to belong to *curvimargo* (6 h).

perornata. **S. perornata** *Th.-Mieg.* "♀ 19 mm. Near *decorata Schiff.* (Vol. 4, p. 80, pl. 4 m). Pure white, forewing with a very fine black median line, crossing a small cell-mark of the same colour. Postmedian a little more zigzag, followed by blackish brown spots. Distal margin of both wings marked with black between the veins, especially near the apex. No central line on the hindwing, but a s m a l l d a s h on the discocellular black, not a d o t as in *decorata*. Fringes white, mottled with black. Underside pure white, w i t h o u t m a r k i n g s. Face white, grey above. Ibo, Mozambique, 1 ♀." Unknown to me.

tricommata. **S. tricommata** *Warr.* (7 c). Also similar to some forms of *decorata*, or still more like the Indian *deliciosaria Walk.*, of which latter it may be a race, in general less sharply marked, the underside unmarked. Hindtarsus of ♂ very short. From *perornata* it must differ in the black face, position of median line (which, moreover, is strong on the hindwing) and mixture of brown and blue-grey in the colouring of the subterminal spots. Gambia to the Congo, S. W. Abyssinia and Unyoro, described from the last-named.

elegans. **S. elegans** *Prout* (7 c). Smaller and shorter-winged than *tricommata*, with the maculation differently arranged, the subterminal blotches being costal, hindmarginal, and between 3rd radial and 2nd median. Hindtibial pencil of ♂ strong, tarsus very short. Gold Coast to Congo and (loc. typ.) Uganda.

ossicolor. **S. ossicolor** *Warr.* (= submarginata *Warr.*) (7 c). Also small and short-winged, but not white; ante- and postmedian lines marked with black vein-dots; outer subterminal shade with some rather characteristic dark markings at the radials and near tornus. Hindtarsus of ♂ ⅓ or ¼ hindtibia. Sierra Leone (type) to Congo and perhaps Angola.

quintaria. **S. quintaria** *Prout* (7 c). Whiter than *ossicolor*, but rather less pure white than *tricommata*. Hindtarsus less than ½ hindtibia, but apparently not quite so short as in *ossicolor*, of which at one time I thought it might be a local race. Natal. A few examples from Gazaland, Angola, Nyasaland and even Uganda may *principis.* be slight geographical variations of it, but are insufficient for working out in this difficult group. — **principis** *Prout* has the upperside almost pure white, the forewing beneath smoky proximally and with a postmedian line more or less developed (in *quintaria* almost as unmarked as in *tricommata*). Founded on 6 ♀♀ from Principe, 1500—2000 feet, April—May 1926.

sparsipunctata. **S. sparsipunctata** *Mab.* (7 c) is perhaps another race of the same species as the two preceding, and would provide the oldest name. Except that the distal margin and the postmedian line appear slightly less sinuous, I can point to little difference. Madagascar.

S. roezaria *Swinh.* (5 c), though also similar, is not difficult to distinguish. Face red (dark-mixed on upper ⅓), hindtarsus of ♂ less short (not much under 1), postmedian of forewing more strongly angled at 1st radial, etc. Madagascar. *roezaria.*

S. subtaeniata *Bastelb.* (8 c), doubtfully from "Madagascar", perhaps belongs about here. White, the forewing with the markings weak (partly abraded) excepting the composite subterminal spots about the 1st radial and the fold, the hindwing more strongly punctuated, especially near base and along abdominal margin, and with yellow-brown subterminal band and antemedian half-band. I suspect a form of *insolata Btlr.* (Vol. 4, p. 78, pl. 7 c, as *butleri*) with erroneous locality. *subtaeniata.*

S. rufinubes *Warr.* (7 c) is the African representative, perhaps eventual synonym, of the Indian *pulchellata Fb.*, which will be noticed in Vol. 12. More variable in Africa and with a larger percentage of reddish forms, the ♀♀ heavily clouded in distal area. From *sanguinisecta* it differs in its smaller size, rounder hindwing, shorter tarsus, terminal line almost as noticed under *sinnaria*, etc.; from *nepheloperas* in its spurless ♂ hindtibia, less angular median line, different maculation at apex, etc. Known from Ivory Coast, Uganda (loc. typ.), Abyssinia and Somaliland to Dar-es-Salaam, and Madagascar. *rufinubes.*

S. horiochroea *Prout* (7 c). Somewhat similar to *rufinubes*, especially in the character of its terminal line. Rather less broad-winged, considerably paler and with the lines much less bent, the median less thick; cell-dots blackish but very small. Mandera, British Somaliland, only yet known from a series of ♀♀. *horioehroea.*

S. nemorivagata *Wllgrn.* (= bonaventura *Warr.*) (7 d). Somewhat like the palest *rufinubes* and with ♂ hindtarsus similarly shortened; larger, forewing with terminal line not continued round the apex, cell-dot sharply black, hindwing more angled, with straighter, in places dark-marked postmedian. The last character and the encircled cell-dot of the hindwing distinguish it also from *penricei* (7 b) and *subcatenata* (7 b). Best known from Natal, but has occurred in many parts of eastern Africa and occasionally in Nigeria and on Principe. Perhaps a form of the Indian *nictata Guen.*, but with hindwing less acutely angled. *nemorivagata.*

S. fimbrilineata *Warr.* (7 d). Considerably larger than *nemorivagata*; forewing with distal margin more sinuous, subapical spot and oblique dash wanting; hindwing crenulate. Variable, but it has not yet been found possible to divide the E. African forms (Kenya to Natal) into races; nor even to separate those from Madagascar. The name-type, from Kikuyu Escarpment, has the dark marks in and outside the postmedian strong. — ab. **protuberans** *Warr.* has the brown marks outside the postmedian almost obsolete. — ab. **niobe** *Fawcett* is suffused almost throughout with a light brownish drab. — **immaculata** *Warr.*, from the Ivory Coast, is perhaps a race, whiter and more weakly marked, without the dark marks on the postmedian. But forms almost as weakly marked and with the ground-colour still whiter occur also in Uganda and Nyasaland, together with more typical ones. A few examples before me from Angola seem also rather near the namctype. *fimbrilineata. protuberans. niobe. immaculata.*

S. aphercta *Prout* (7 d) 22—25 mm, thus no larger than *nemorivagata* (7 d); easily distinguished therefrom by the absence of the characteristic markings of the distal area, from *fimbrilineata* by the smaller size and smoother wing-margins, from both by the merely curved, not angled, median shade of the forewing and the large cell-dot of the hindwing. Southern Nigeria (loc. typ.) and Belgian Congo. *aphereta.*

S. vitiosaria *Swinh.* (8 e), founded on 3 not very fresh specimens from E. Quaso, Masai (Kenya Colony) has about the shape and coloration of the Palaearctic *floslactata Haw.* (Vol. 4, pl. 4 i); but is larger (especially the ♀), the median shade of the forewing thicker and more sinuous, the clear space between it and the postmedian broad, the black cell-dot of the hindwing distinct, etc. ♂ with antennal ciliation moderate, hindtarsus at least ½ hindtibia. *vitiosaria.*

S. ansorgei *Warr.* (7 d). A conspicuous species on account of its large size and green colouring. The antennal cilia of the ♂ arise from slender (rudimentary) pectinations, but there seems no need for Warren's genus *Chlorocraspedia*, proposed for it. Cameroons, Congo and Uganda, the type a ♀ from Port Alice. *ansorgei.*

S. tenera *Warr.* (7 d). Also strikingly distinct, pallid grey, with white bands bordering the fine dark lines. Costa more than usually rounded, hindwing with short tail; terminal line not interrupted. Hindtibia of ♂ with hair-pencil, tarsus rather less than ½. Nandi Country. Recently received from Uganda. *tenera.*

S. suda *Prout* (8 f). Shining white, with the costal edge buff, the lines not very sharply defined, obsolescent anteriorly, the postmedian obscurely lunulate-dentate; no median shade, no terminal line; hindwing subquadrate, the termen slightly sinuous. Underside with costal edge of forewing black in proximal part, the entire cell smoky; otherwise almost unmarked. Antenna with fascicles of cilia rather long (about 2). Hindtibia with pencils, tarsus little over ½. Lake Kivu: Rugege Forest, Ruanda district, 7000 feet. *suda.*

S. metacosmia *Prout.* Face and palpus reddish, mixed with black. Hindtibia lost in the only 2 known ♂♂. Wings shining white, with purer white cell-marks, quite as in *argentidisca* (7 d); grey irroration *metaeosmia.*

less definite, forewings with antemedian line much less oblique, median shade diffuse, postmedian about 3 mm from termen. Hindwing with inner margin rather elongate, bend in termen faint. Kenya Colony and Usambara.

argentidisca. **S. argentidisca** *Warr.* (= naias *Warr.*) (7 d). Somewhat variable in the strength and curvature of the postmedian line of the forewing and its accompanying shade, but constant in the elongate white cell-mark of the hindwing, all the rest of that wing densely irrorated with olive-grey. Kenya Colony. Also in Tanganyika Territory.

coniargyris. **S. coniargyris** *Prout* (8 e) ♀, 24 mm. Face black. Wings white, copiously and almost regularly sprinkled with black; cell-dot minute; lines pale buff, somewhat obscured by the black irroration, finer than the olive-buff lines of *quadrifasciata*, much more sinuous, more as those of *superior Butl.*, (Vol. 4, pl. 4 m) etc.; median line well beyond cell-dot; outer subterminal ill-defined, macular; terminal dots minute. Hindwing with 1st line wanting, median proximal to cell-dot. Underside with the irroration weaker, cell-dots and terminal dots as above, lines on forewing fainter and greyer, on hindwing obsolescent. N. E. of Mweru: Lufonso River, E. Luvua Valley, 5700 feet, only the type known.

quadrifasciala. **S. quadrifasciata** *Bastelb.* (= glaucocyma *Hmpsn.*) (8 f) is characterized by having the lines developed into slightly sinuous bands. Hindwing not angled: ♂ hindtarsus not much shorter than the tibia. Nigeria, Angola, Uganda and from Kenya to South Rhodesia; described from Kigonsera, Lake Nyasa.

antiloparia. **S. antiloparia** *Wllgrn.* is probably, according to the description, identical with *sincera* and the name would have priority. But Wallengren's type ♂, from the River Kuisip, S. W. Africa, has the lines broad ("fasciae") the proximal subterminal broader than the others, the forewing beneath perhaps more infuscated than in *sincera* and the antennal ciliation perhaps stronger. A Barotse ♂ in the Tring Museum may belong with it, but does not show any special broadening of the proximal subterminal band. A Transvaal specimen subsequently recorded by Wallengren is probably *sincera*.

sincera. **S. sincera** *Warr.* (7 e). Lines more slender, perhaps more olive-tinged (yet scarcely as in *quadrifasciata*), the distal subterminal very slight. Structure similar. Angola (type), Rhodesia and Transvaal.

megalostigma. **S. megalostigma** *Prout* (8 f), founded on a ♀ from Abanga River, Gaboon, is perhaps related to *straminea*, but is much paler (ivory-yellow), broad-winged, the lines almost obsolete, the cell-spot of the hindwing without any accompanying cloud.

ludibunda. **S. ludibunda** *Prout* resembles *minorata* (7 g) in size, shape and markings, but has the straw-yellowish tinge which is characteristic of the following group. ♂ antennal ciliation considerably longer than in *minorata* (about 2), hindtarsus over ⅔ tibia. S. Rhodesia (type) and southward to Cape Colony.

straminea. **S. straminea** *Feld.* (8 l) exists in two principal forms, scarcely connected by intermediates. The name-typical has large cell-spots, that of the hindwing accompanied distally by a large brown cloud. — ab. *sumpta.* **sumpta** *Prout* is an unimportant aberration, with the dark cloud of the hindwing more extended, crossing *melliflua.* the postmedian line. — ab. **melliflua** *Warr.* is the other principal form, the cell-spot of the forewing punctiform, that of the hindwing, as well as the distal cloud, wanting. — The hindtibia of the ♂ is strongly dilated, the tarsus much shortened. Natal and Cape Colony, Felders' type from Knysna.

proterocelis. **S. proterocelis** *Prout* (8 f), founded on a ♀ from Ilesha, Southern Nigeria, may perhaps be a form of the preceding, but has blackish terminal dots, a more sinuous postmedian line and less faintly marked underside.

macrocelis. **S. macrocelis** *Prout* (7 e) is again similar, but has a hindmarginal blotch on the postmedian of the forewing and generally a corresponding, but smaller, mark on the abdominal margin of the hindwing; cell-dots quite small. Structure nearly as in *straminea* (8 l), so that it is just possible we are dealing with a single polymorphic species, of which *macrocelis* would be the usual W. African form. Cameroons (type), French Congo and Sierra Leone.

flavissima. **S. flavissima** *Warr.* (7 c). Smaller, hindwing less bent, postmedian of both wings almost straight, fringes rather strongly reddish. Nigeria (loc. typ.) and Sierra Leone.

transsecta. **S. transsecta** *Warr.* (♀ = dissimulans *Warr.*) (7 e). The largest of the group, much paler than the 4 preceding, and recognizable at once by its firm oblique line and bright brown costal edge and fringes. *clarissima.* Range as in *flavissima*. — ab. (? subsp.) **clarissima** *nov.* is still larger (♂ 38 mm) white, the line very firm, on the forewing a little more oblique, reaching SC^4 relatively nearer to the apex. Uganda: Nabagulo Forest, 5 miles from Kampala, October-November 1921 (W. Feather), a fine ♂ in Mus. Tring. As the hindwing is rather well bent at R^3, this may perhaps prove a species.

habilis. **S. habilis** *Warr.* (7 e). Smaller than *transsecta*, more brownish, the fringes concolorous or a little paler, the line less oblique, at anterior end slightly curved, a cell-dot present on forewing. Gold Coast to Cameroons, the type from Nigeria.

S. toxophora *Prout* (8 f). Much more ochreous than *habilis*, the antemedian line curved but not angulated, postmedian less oblique, anteriorly more curved, cell-dot obsolete. S. Cameroons. *toxophora.*

S. rectisecta *Prout* (8 f) is intermediate in size and markings between *transsecta* and *laevipennis* (7 e), the postmedian line straighter than in the latter, less oblique than in the former, further distinguishable by its smooth yellow colour and deeper yellow markings. S. Cameroons. *rectisecta.*

S. lathraea *Prout* (8 g). Easily distinguished from *laevipennis* by the course of the postmedian line and the absence of antemedian and cell-dots. Nyasaland: Luchenza. *lathraea.*

S. laevipennis *Warr.* (7 e). Near the colour of *transsecta*, sometimes almost as white as *clarissima*, lines and fringes much less bright, postmedian line sinuous, approximately parallel with the distal margin. ♂ hindtarsus very short. — ab. **uninotata** *Warr.* is one of the whitish forms and seems to have the antemedian line obsolete, but is somewhat rubbed. — *laevipennis* is distributed from Sierra Leone to Kasai district and Uganda; the type was from the Cameroons. *laevipennis.* *uninotata.*

S. subperlaria *Warr.* (= sufficiens *Warr.*, displicitata *Kheil*) (7 e). On an average larger, nearly always white or whitish, glossy, the fringe concolorous, the postmedian more or less dentate as well as sinuate, the antemedian also sinuous, generally closer to the cell-dot, which is generally sharper than in *laevipennis*, a subterminal line also often well developed. Hindtarsus of ♂ less shortened than in *laevipennis*. Extremely variable in the strength of the markings, perhaps embracing 2 or more species. Distribution as that of *laevipennis*. — **acutangula** *Swinh.*, from Uganda, seems to be a very pale form with the postmedian rather thick and very deeply lunulate. *subperlaria.* *acutangula.*

S. argyroleuca *Hmpsn.* (8 g). Perhaps a very clean-looking silvery-white form of *subperlaria*, but the postmedian is perhaps less lunulate, the cell-dot of the hindwing sharply black. ♂ hindtarsus perhaps somewhat shorter. N. W. Rhodesia (type), Gazaland, Kenya Colony, ? Uganda. *argyroleuca.*

S. ochreofusa *Warr.* (7 e). Less pure white than *argyroleuca*, more like an extremely weakly marked *subperlaria*, but with the hindtarsus shorter. Cell-dots scarcely traceable, the faint postmedian line not quite so sinuous as in *subperlaria*. Underside unmarked, even the terminal dots wanting. Unyoro. *ochreofusa.*

S. pyraliata *Warr.* (7 f). Smaller than *subperlaria* (7 e), with a decided yellow tinge, the postmedian irregularly thickened, strongly expressed also in the underside of the forewing, where it is slightly browner; black cell-dot of forewing also distinct beneath. Hindtibia of ♂ strongly thickened, tarsus quite short. Liberia to Belgian Congo and Uganda, the type from S. Nigeria. *pyraliata.*

S. isomala *Prout* (8 d). Rather broad-winged, with the distal margins faintly sinuous. Antennal ciliation of ♂ longer than diameter of shaft, hindtibia moderately dilated, tarsus not much shorter. Strangely similar to *aequidistans Warr.*, from Timor, of which only the type ♀ is known; irroration darker, antemedian line right-angled in the cell, median less sinuous and more oblique. Nairobi, the type. A browner ♀, in poor condition but probably conspecific, from Mlanje, 2300 feet. *isomala.*

S. stephanitis *Prout* (8 g). Antennal ciliation nearly even, about as long as diameter of shaft. Hindtibial pencil strong, tarsus less than ½ tibia. Recognizable by the faintly sinuous distal margins, the creamy white ground-colour and dark olive-buff costal edge and markings. Underside with sharp cell-dots, the other markings quite shadowy. Perhaps near *caducaria* (7 f), but more recalls the South American *abornata Guen.* Virunga Mountain (Kivu), 9000 feet, (type ♂); Kabira Forest (Ruanda), 7000 feet (1 ♂). *stephanitis.*

S. caducaria *Swinh.* (7 f). More glossy than the neighbouring species, the markings weaker, the postmedian anteriorly almost straight; the subterminal shades relatively rather strong, giving, in the best-marked specimens, a slight impression of a dark distal area, traversed by the sinuous subterminal. Hindtarsus scarcely abbreviated. Kenya Colony: common in the Escarpment. *caducaria.*

S. mollicula *Prout* (7 f) may be placed here, as it has about the same shape and coloration as *caducaria* (though less glossy), but may well belong with the *spoliata-lubricata* group. Face whitish, only a little dark-mixed in upper part. ♂ with fairly long ciliation, strongly pencilled hindtibia and short tarsus (about ½). Cell-dots strong; median and postmedian lines of forewing more distal than in *caducaria*, the latter with dark vein-dots; subterminal less strongly sinuous, its accompanying shades sometimes weak. Madagascar: Diego Suarez. *mollicula.*

S. crawshayi *Prout* (8 g). Larger than even the largest *praeruptorum*, considerably paler. Antenna subserrate, with longer ciliation. Hindtibia long, tarsus $^2/_5$ or slightly less. Postmedian line strongly inbent between the radials, but the forewing without the acute tooth on the 1st radial, on the other hand with a thickening in the sinus, as in *caducaria*; fringe slightly irrorated, but without definite black dots. Forewing beneath suffused to just beyond the postmedian, then whitish; hindwing whitish, almost without markings except the cell-dot and terminal line. Boromo, Kikuyu. *crawshayi.*

internata. **S. internata** *Guen.* (= strigulifera *Walk.*, illiturata *Walk.*) (7 f) is recognizable by the brown hind-marginal spot between the postmedian and the subterminal of the forewing as well as by the shape of the postmedian, etc. Hindtibia of ♂ with strong pencils, the tarsus quite short. The name-type is small, cartridge buff and without black dots on the fringe and is found in Namaqualand (type locality) and from the Cape to the Transvaal. — ab. **pudens** *Warr.* is pinkish-buff, with more cinnamon-buff shading, the markings weakened. 1 ♀ from Durban. — **circumpunctata** *Warr.*, founded on a worn ♂ from Barberton, seems to be a mere aberration with the vein-dots and fringe-dots rather well developed, the posterior spot of the forewing more fuscous. — **praeruptorum** *Prout* (7 f) is perhaps a separate species, as the ♂ hindtarsus seems a little less shortened; generally larger, though very variable in size (25—30 mm), as well as in markings, always greyer, with strong fringe-dots, the posterior spot of the forewing varying from much darker grey or blackish to complete evanescence. Kikuyu Escarpment, 6500—9000 feet, obtained in plenty by Doherty. Also known from Kilimandjaro.

pudens. *circumpunctata.* *praeruptorum.*

cervinata. **S. cervinata** *Warr.* (7 f) is imperfectly known, perhaps a somewhat less broad-winged form of the following, rather paler or more tinged with fawn-colour. From Sierra Leone I have only seen the type ♀ and another. A series from Bingerville, Ivory Coast, is rather variable and in some measure transitional.

improba. **S. improba** *Warr.* (7 f). Somewhat resembles a small *praeruptorum*, but the apex of the forewing is a little less produced. Equally variable, but always more suffused, sometimes very dark, the postmedian line relatively weaker, etc. Uganda (the type series), Upper Congo and Cameroons.

dux. **S. dux** *Prout* (8 g), founded on 2 ♀♀ from São Thomé, is a relatively large species with nearly the coloration of *cervinata* or the lighter ♀♀ of *improba*, the markings similar, the forewing slightly more produced apically. Abdomen with blackish dorsal spots. From *praeruptorum* (7 f) it differs in its somewhat larger size, anteriorly more zigzag postmedian, etc. A ♂ from Kumbo, Nigeria, 5500 feet, in my collection, rather smaller and paler than the type and without the abdominal spots, may represent a race and has the hindleg structure of *internata*.

acidalia. **S. acidalia** *Holl.*, described as "*Capnodes?*", is unknown to me, but Sir George Hampson, who examined the type, declared it a *Scopula*. "Pale cinereous. The forewings are crossed by a subbasal and parallel limbal band, and have a triple series of very fine light brown submarginal waved markings. Just below the costa before the apex are two minute blackish dots. The (distal) margin is defined by minute blackish dashes on the interspaces." Hindwing similarly marked. Both wings with a minute blackish cell-dot. "Underside pale whitish. The lines of the forewing reappear, especially the submarginal series. Neither wing shows the discal dot. Expanse 22 mm." W. Africa. Possibly a pale aberration of *improba* (7 f), weakly marked beneath.

luxipuncta. **S. luxipuncta** *Prout* (8 g). 26 mm. Antenna subdentate-fasciculate, the ciliation rather long. Hindtibia little dilated, but with a long pale hair-pencil; tarsus somewhat over ½. Forewing whitish buff, with more fleshy suffusion in distal area; shadowy lines of the latter colour, the median excurved considerably beyond the strong black cell-dot, the postmedian black vein-dots exceptionally angled outward at 1st radial. Hindwing with termen waved, very slightly prominent at 3rd radial. Forewing beneath irregularly suffused with grey proximally, cell-dot black, markings outside it greyer; hindwing almost unmarked, except cell-dot and terminal dots. W. Kivu (loc. typ.). Also from Kampala, Uganda.

cornishi. **S. cornishi** *Prout* (7 f). 23—28 mm. In shape near *luxipuncta*, the forewing being scarcely so broad and convex-margined as in *praeruptorum* and *improba*. The whitish ground-colour shows, in fresh specimens, a strong fleshy suffusion; markings intermediate between those of *luxipuncta* (8 g) and the preceding group, the postmedian recalling the latter, the very distally placed median of the forewing as in the former, but distinct from that of both in its less grey, more fawn colouring. ♂ antenna nearly as in *luxipuncta*, hindtibia with normal hair-pencils, tarsus well over ½. Madagascar: Ambinanindrano, 50 km W. of Mohanoro.

sublobata. **S. sublobata** *Warr.* (= khakiata *Warr.*) (7 g). An unimposing little species, best recognized by its tone of colour and especially the shape of its hindwing, with appreciably produced anal angle. Hindtarsus of ♂ over ½ tibia. Transvaal (*sublobata*) and Natal (*khakiata*) and extending to Angola, Barotse and Nyasa.

crassipuncta. **S. crassipuncta** *Warr.* Rather smaller and darker than *sublobata*, forewing slightly less oblique-margined, hindwing slightly more sinuous but not dissimilar in shape; cell-dots enlarged, that of hindwing elongate; postmedian somewhat farther from termen. Benguella, only the originals (2 ♀♀) known.

adelpharia. **S. adelpharia** *Püng.* (Vol. 4, pl. 3 k, as *adelphata*). Of this species, described from Jericho, but perhaps a straggler from the African region, I have seen a few examples — or at least I cannot distinguish them — from Senegal, Gambia and even Angola. Less dusted than *minorata* (7 g), the lines less grey, the underside weaker-marked; hindtarsus shorter.

S. lactaria *Walk.* (= tectaria *Walk.*) (7 g). — Difficult to distinguish from *minorata* except that the postmedian is markedly curved inward at the costa, as in *adelpharia*, which it also generally approaches in having less strong irroration than *minorata*. Hindtarsus of ♂, on the other hand, at least ⅔ tibia, thus not or scarcely shorter than in *minorata*. Sierra Leone and probably in a great part of Africa. Larva of the ordinary *Scopula* form but green (Bacot). *lactaria.*

S. instructata *Walk.* Somewhat larger than *minorata*, of a more fleshy tinge, the lines perhaps still straighter, the postmedian a trifle farther from termen, the subterminal shades more macular. Antennal ciliation of ♂ rather long. Hindtarsus of ♂ almost as long as tibia. Knysna. — **derasata** *Walk.* may be a paler aberration of the same, with larger cell-dot of hindwing, postmedian perhaps more denticulate. The structure seems about the same. Cape Town. *instructata.* *derasata.*

S. minorata *Bdv.* (= mauritiata *Guen.*, consentanea *Walk.*, ? intervulsata *Walk.*) (7 g). Perhaps the most widely distributed African *Scopula*, even if it be not, as has been suggested, conspecific with *actuaria Walk.* (India) and *ochroleucata H.-Sch.* (Mediterranean). First described from Mauritius, known also from the Comoro Is. and Madagascar and almost throughout continental Africa. — **mombasae** *Warr.* is a small pale form from Mombasa and the coastal region as far as Kilwa, but similar examples occur occasionally elsewhere. — **luculata** *Guen.* appears, from the types, to be a rather broad-winged, bone-coloured form (? race) of *minorata*. Réunion. *minorata.* *mombasae.* *luculata*

S. serena *Prout* (7 g). Similar to *minorata* f. *mombasae* but with very straight lines (parallel with the distal margin), the postmedian not incurved between the radials, and with the ♂ hindtarsus scarcely shorter than the tibia. Larva extremely long and thread-like, much more so than that of *lactaria*, blackish brown, mottled with paler brown and with the extremities and legs of this paler colour. Founded on bred specimens from Sierra Leone, but very widely distributed to Angola, E. Africa, Natal and Madagascar. Scarcely distinguishable from *lechrioloma Turn.* from Queensland. *serena.*

S. astrabes *Prout.* 16 mm. Structure as in *serena*. Both wings appear slightly narrower still, the margins being less curved, the apex of the forewing rather sharp. Ground-colour much more fleshy and with stronger dark irroration; lines greyer, much stronger, the median of the forewing crossing the cell-dot, the median and postmedian of the hindwing very straight, especially the latter, which approaches the cell-dot; marginal shade stronger, the rather large terminal dots slightly connected by a grey line. Underside with similar distinctions. Estcourt, Natal. *astrabes.*

S. paradelpharia *Prout* (7 g). Expanse 15—18 mm. Pinkish buff, with the dark lines in part pale-edged, sometimes reminiscent of the Neotropical genus *Scelolophia*. Easily distinguished from similarly coloured forms of all the preceding species by the extremely short ♂ hindtarsus (about $^1/_5$ tibia). Ivory Coast, a good series; also Senegal. *paradelpharia.*

S. terrearia *Mab.* "Grey, not at all yellowish or whitish, crossed by 3 common reddish lines, which are almost straight, subcrenate; on the forewing the inner and 2nd are sharply expressed, curved at the costa, the outer more obscure, approximated to termen and somewhat confused; on the hindwing similar, the 3rd still more obscure and confused; at the base a common line which might be reckoned as a 4th one; cell-dot midway between basal and median on forewing; fringe whitish, preceded by minute black dots. Underside shining whitish. Loukoubé" (Madagascar). A broken ♀ ex coll. Mabille (probably the allotype) expands scarcely 18 mm. I call the lines brown rather than "reddish". *terrearia.*

S. oenoloma *Prout* (8 g). Face black, vertex whitish, antennal ciliation somewhat longer than diameter of shaft. Hindtibia of ♂ with hair-pencil, tarsus about as long as tibia. Upperside variable in colouring, some specimens much paler than the ochreous type here figured, median shade sometimes more strongly mixed with grey, postmedian line sometimes more slender and marked with blackish dots on the veins; the vinaceous fringe (only proximally somewhat suffused with the ground-colour) is characteristic. The underside has always the usual pale ground-colour of *Scopula*, only becoming more ochre at costal edge; forewing proximally irrorated with black; markings slight, especially on forewing; fringe vinaceous, with pale base. Nyasaland: Mlanje Plateau, 6500 feet. *oenoloma.*

S. carnosa *Prout* (7 g). ♂ antenna as in *oenoloma*, hindtibia scarcely dilated, tarsus a little longer than tibia. Characterized by the deep fleshy colour, without dark irroration; more pinkish than *pudens*, cell slightly longer, hindwing a little less crenulate, postmedian line straighter, forewing beneath greyer. Transvaal: Potgieters Rust. *carnosa.*

S. euchroa *Prout.* Larger than *carnosa* (28 mm). Hindtibia with hair-pencils, tarsus not quite as long as tibia, 1st joint fully twice as long as 2nd. Ground-colour paler, terminal black dots undeveloped; underside distinctive, the forewing heavily suffused with black-grey as far as the (very oblique) median line, near base almost black, the median and postmedian lines distinct, black-grey; hindwing almost unmarked, excepting the cell-dot. Cape Province: Witte River, Wellington, 1500 feet, 1 ♂. *euchroa.*

rossi. **S. rossi** *Prout* (7 g). Very similar to *agrapta* but more suffused with brown and more strongly marked. Perhaps a form of the same. Natal.

agrapta. **S. agrapta** *Warr.* (7 g). Antennal ciliation of ♂ moderately long (about 1½); hindtibia with pencil, tarsus ⅔ or ¾ tibia. Dirty whitish, the cell-dots sharp, the lines very weak, especially in the ♂; the median, which on the forewing is just beyond the cell-dot and not very oblique, is sometimes strong in the ♀. Kenya (type), Tanganyika Territory and Natal.

opperta. **S. opperta** *Prout* (7 g). A glossy white species with olive-grey irroration and markings, further distinguishable from *spoliata* by the somewhat thicker hindtibia, slightly less long tarsus, and less punctiform postmedian line; anterior terminal dots of forewing elongate into dashes. Antennal ciliation of ♂ about 1. Natal.

spoliata. **S. spoliata** *Walk.* (= pygarata *Wllgrn.*, pygargata *Wllgrn.*) (7 h). A rather common species in Cape Colony and Natal and perhaps reaching Uganda. Hindtarsus of ♂ fully as long as tibia. Antennal ciliation a little longer than in *opperta*, which see for further differentiation. Cell-dot on hind- stronger than on forewing. Less broad-winged than *agrapta*, with different structure, generally much stronger markings, more oblique median shade, etc.

pertinax. **S. pertinax** *Prout* (7 h). Smaller and whiter than *spoliata*, the ♂ hindtarsus much shorter (scarcely over ½), markings pretty similar; terminal dots rather strong. Natal.

magnidiscata. **S. magnidiscata** *Warr.* (7 h). Almost as small as *pertinax*, more brownish, the median shade faint. Easily known by the enlarged cell-dots, particularly that of the hindwing. Hindtarsus of ♂ at least as short as in *pertinax*. Angola (type) and N. Rhodesia.

latitans. **S. latitans** *Prout* (= reconditaria *Snell.* nec *Walk.*) (7 h) represents the *nesciaria* group of the Indo-Australian Region. Nearly as broad-winged as *agrapta*, colour more as in the brownest-tinged *spoliata*, irroration less strong than in the latter, cell-dot of hindwing not enlarged, hindtarsus of ♂ shortened, about ½ tibia. Described from Zaire (Congo) but widely distributed: Kasai, Angola, Kenya Colony to Natal.

benenotata. **S. benenotata** *Prout* (8 h). ♂ 26 mm. Similar in structure to *latitans*. Forewing a little narrower, with distal margin somewhat more oblique; colouring warmer, pinkish buff or light pinkish cinnamon, cell-dots larger, postmedian line marked with angular black dots or short teeth outward on the veins and on the hindwing with a larger black dot at abdominal margin; fringe with small dots at base opposite the veins. Forewing beneath correspondingly well marked. Madagascar: Ivohimanitra forest, Tanola.

obliquisignata. **S. obliquisignata** *Bastelb.* (8 h). Rather smaller than *latitans*, the ♂ hindtarsus less than half as long as the tibia, but I think not quite so short as in *lubricata*. Markings obsolescent anteriorly (but the specimen is not quite fresh), the antemedian and median lines of forewing strongly oblique; terminal dots well developed in anterior half. Usambara.

lubricata. **S. lubricata** *Warr.* (7 h) perhaps embraces several species which have not yet been satisfactorily worked out. Smaller than *latitans*, the ground-colour typically whiter, but best distinguished by the short hindtarsus of the ♂, which is only about ⅓ the length of the tibia. Described from Angola, but believed to be distributed as far as Sierra Leone and to Kenya Colony. Forms with similar structure but more brownish occur in South Africa and others with stronger postmedian vein-dots on the Comoro Islands, but I forbear to name them until the group is more thoroughly understood.

planipennis. **S. planipennis** *Warr.* has also similar structure, but the cell-dots and terminal dots are minute, (the former on the forewing not discernible), the lines almost obsolete. Ground-colour of a dirty yellowish tinge. Underside almost unmarked. The forewing may be slightly more rounded at the apex than in *lubricata*, but it is a pity that Warren named a species from so obscure a specimen without confirmatory material. Sierra Leone, 1 ♂.

comes. **S. comes** *Prout* (7 h). Hindtarsus of the ♂, as in the following, extremely short. Easily distinguished by the postmedian line of the forewing, which is oblique outward — in a succession of teeth — from costa to 1st radial; black cell-dots less concise, being accompanied (or on the forewing generally superseded) by some brownish scaling. São Thomé.

internataria. **S. internataria** *Walk.* (7 h). Rather smaller than *lubricata*, more fleshy-tinged, hindtarsus of ♂ less than ¼ hindtibia. Widely distributed, Ivory Coast, Congo (loc. typ.), Angola, Uganda, S. Sudan, Kenya to Nyasa. — *punctistriata.* **punctistriata** *Mab.* (= eucentra *Prout*) has the markings more sharply expressed, especially the vein-dots or minute teeth on the postmedian line. Madagascar. — ab (?) *cuspidata.* **cuspidata** *Mab.* "Ochraceous grey, irrorated, the lines reddish," etc. Locality not definitely given, probably Madagascar. 2 ♀♀ in the Oberthür collection, one labelled Antongil, may well be strongly marked aberrations of *punctistriata*.

S. mascula *Bastelb.* (8 h) is possibly also an aberration of the preceding, of a more greyish tone, but the median shade seems more bent at the 3rd radial. On the type I noted "♂ hindtarsus 1/5." Ibo, N. Mozambique. *mascula.*

S. empera *Prout* (7 h). Hindtarsus of ♂ at least as short as in *mascula*. Very like *punctistriata* but smaller, forewing (at least in the ♂) appreciably straighter, lines weaker, often a good deal suffused, postmedian of forewing more excurved near costa, not or scarcely black-dotted on the veins. N. Madagascar. *empera.*

S. rufolutaria *Mab.* (= gaudialis *Prout*) (7 i). Hindtarsus of ♂ at least as short as in *empera*. Very different in its cinnamon colouring, etc. Comoro Islands. *rufolutaria.*

S. aspiciens *Prout* (7 i). In its reddish colouring intermediate between *punctistriata* and *rufolutaria*. Forewing rather narrower; very distinct in the white scaling which borders the black cell-dot, at least distally. ♂ hindtarsus short, but less extreme than in the *internataria* group (about 1/3). Madagascar. *aspiciens.*

23. Genus: **Glossotrophia** *Prout.*

To this Palaearctic genus, which differs from *Scopula* in its long tongue, 2-spurred ♀ hindtibia and irregular tibial armature of the ♂, I have provisionally referred one African species of which the ♀ is unfortunately unknown. See Vol. 4, p. 82.

G. natalensis *Prout.* Much like a dark (i. e. densely irrorated) form of *S. nigrinotata* (6 l), forewing rather narrower, lines well expressed, fairly broad, but not especially blackened at the costa, the postmedian with a very deep curve inward between the radials. Tongue long, yet less extreme than in true *Glossotrophia*; ♂ hindtibia with 1 spur; hindwing slightly sinuate between the radials, 2nd subcostal very shortly stalked (in *S. nigrinotata* separate). Natal, Mooi River, 1 ♂. *natalensis.*

24. Genus: **Zygophyxia** *Prout.*

General aspect of narrow-winged *Sterrha*, in most points of structure also agreeing with section A of that genus, the ♂, as well as the ♀, having 2 spurs on the hindtibia. Distinguished chiefly by the non-stalking of the 2nd subcostal vein of the hindwing with the 1st radial. Tongue slender. Abdomen generally elongate, but fairly robust, especially in the ♀. A small genus, its distribution restricted to dry and semi-desert country, chiefly in East Africa and the plains of India.

Z. palpata *Prout* (8 h). Face and palpus brown, the latter much more heavily scaled than in typical *Zygophyxia*. Wings less extremely narrow than in *relictata*, white with moderately dense but unevenly distributed brown-grey irroration, the median shade proximal to the cell-dot on both wings, the subterminal strong, band-like, parallel with termen. Hindwing with a terminal excision between 2nd median and anal angle. Kenya Colony: Kibwezi, 1 ♀. *palpata.*

Z. tornisecta *Prout* (7 i). Near *palpata* (8 h) with a similar excision in the hindwing, but with the palpus not quite so robust, the wings slightly broader, of a more brownish white and with the lines more brownish, the median shade more distally placed, the postmedian stronger, both the subterminal shades present, the proximal one not so strong as in *palpata*. British Somaliland. *tornisecta.*

Z. transmeata *Prout* (8 h). Superficially still nearer to *palpata*, but with the hindwing not sinuate; whitish, the postmedian band slightly more sinuous, more conspicuous than any other marking. Palpus scarcely as strong as in *tornisecta*. British Somaliland. *transmeata.*

Z. erlangeri *Prout* (7 i). In structure and coloration close to *relictata*, in markings nearer to *tornisecta*. Only the cell-dots and the band-like outer line are distinct, both above and beneath. Hindwing not noticeably paler than forewing; terminal marks punctiform (in *relictata* linear); underside of palpus and of wings paler than in *relictata*. ♂ unfortunately unknown; a series of 10 ♀♀ was collected by Baron C. von Erlanger on the Ganale River and district, the type from Djeroko, Merehan. *erlangeri.*

Z. relictata *Walk.* (7 i). Recognizable by its brownish tone, with rather paler hindwing (especially in the ♀), extremely oblique central dark shade, dotted outer line, etc. Described from India but has proved to occur locally in Senegambia, Sudan, Kenya and Tanganyika Territory, Formosa and Queensland. *relictata.*

Z. roseocincta *Warr.* (8 h) has a tinge of olive in the pale ground-colour and is very conspicuous in the bright rose-pink borders besides, on the forewing, a very oblique, anteriorly forked, proximal band. Abdomen above tinged with the same colour. Described from Dar-es-Salaam, known also from Gambia, Nyasa and S. Mozambique. *roseocincta.*

stenoptila. **Z. stenoptila** *Prout* is perhaps a very dull-coloured form of the preceding, almost without reddish tinge, the cell-dots sharply black, the lines not entirely obsolete, thus somewhat intermediate towards *relictata*. Transvaal. I have seen a dingy aberration of *roseocincta* from Senegal which in a measure links the two species together.

25. Genus: **Sterrha** *Hbn.*

This genus, to which I formerly (see Vol. 4, p. 141) assigned the younger name of *Ptychopoda*, is at least as rich in species as *Scopula*, with which the early entomologists united it, though there is really very little connection. Much less homogeneous than *Scopula*, especially in the ♂ structures, but I have not yet found a satisfactory method of subdividing it. Palpus short. Tongue present, but sometimes weak. Antenna of ♂ ciliate or fasciculate. Hindtibia of ♂ generally aborted and spurless, of ♀ with terminal spurs only. Forewing with simple areole, or occasionally (as in some *Antitrygodes*) without anastomosis of the 1st subcostal. Hindwing with 2nd subcostal stalked, often very long-stalked; costal very occasionally (*lilliputaria*, etc.) anastomosing strongly with cell, as in the Larentiinae. On the early stages, so far as known, see Vol. 4, p. 141. Africa, excepting Palaearctic N. Africa, is relatively poor in species, but probably very many still remain to be discovered; the name-typical section, with terminal spurs present on the ♂ hindtibia, is at present unrepresented here.

auriflua. **S. auriflua** *Warr.* (7 i) is a pretty little species, with sinuous rosy bands on an ochre-yellow ground-colour. Head entirely rosy. ♂ with antennal joints projecting, ciliation fairly long, hindleg weak, with tarsus very short. Barotse; also known from S. Rhodesia. A much larger ♂ from Angola, with rather more *oenozonata.* slender bands, perhaps represents a separate race. — **oenozonata** *Warr.*, only known to me in the ♀, is probably a tiny form of *auriflua*, rather duller-coloured and with the bands perhaps a little less sinuous. Dar-es-Salaam and Kilwa, E. Africa.

laticlavia. **S. laticlavia** *Prout.* Near *auriflua* (7 i) in structure, but larger (18 mm), longer-winged, the ground-colour somewhat paler, the markings more tinged with purple, more oblique, the postmedian of the forewing more slender, farther from the median, the markings of the hindwing very slender, excepting the subterminal band. Abdomen and costal edge of forewing with some blackish admixture. Southern Rhodesia.

angusta. **S. angusta** *Btlr.* (8 h). Hindleg of ♂ rather short and slender, but with the tarsus relatively well developed. Distinguishable from the neighbouring species by the duller purple markings, the subterminal band almost reaching distal margin, a cell-dot present on forewing. Nyasa (type) and N. E. Congo (? race).

pericalles. **S. pericalles** *Prout* (8 k). Still more elongate-winged than *laticlavia*, more suggestive of a *Zygophyxia*; subterminal pink band less broad than in the two following, antemedian band of forewing lost in an extensive costal suffusion. Transvaal (type), S. Rhodesia and Orange Free State.

exquisita. **S. exquisita** *Warr.* (7 i). Patagia and tegulae rosy, some rosy maculation on abdomen above. Ground-colour scarcely yellower than olive-buff; the rosy submarginal band and on the forewing the very obliquely bounded basal-costal patch are the only markings, both above and beneath. Described from Zomba (Nyasa-land) but known also from Angola.

inquisita. **S. inquisita** *Prout* (8 h). Possibly a race of the preceding, yellower, the band more purple, more proximally placed, the basal patch shorter anteriorly. Face and palpus purple; vertex buff-yellow. Body buff-yellow, the abdomen above much clouded with dull purple. Legs predominantly yellow, anterior coxa and femur marked with purple. Forewing scarcely so extremely narrow as in *exquisita* and *angusta*; beneath similar, the proximal patch rather weaker. French Guinea: Beyla, 1900 feet, type ♀. I have an identical, but damaged, ♀ from Fort Grampel, French Congo.

basicostalis. **S. basicostalis** *Warr.* (7 i) is a small species, somewhat recalling some forms of *subsaturata Guen.* (Vol. 4, p. 100) but with a dark streak along the costal margin of the forewing proximally and with the hindwing rather more rounded. ♂ with antennal ciliation not long, hindtibia weak, somewhat hairy, tarsus about as *particolor.* long as tibia. — ab. **particolor** *Prout* has the median area darkened with dense reddish-grey irroration. The species is distributed from the Transvaal to Pondoland.

plesioscotia. **S. plesioscotia** *Prout* (8 k) is still smaller, narrow-winged; hindtibia of ♂ slender, tarsus slightly longer than tibia. Base of costa of forewing blackish, rather than (as in *basicostalis*) brown; forewing beneath with extensive dark suffusion. The large cell-dots and absence of clouding between postmedian and subterminal lines distinguish it from *squamulata* and the antennal ciliation seems to be shorter. Costal edge more arched than in *macrostyla*. Founded on a ♂ from Dunbrody, Cape Colony.

macrostyla. **S. macrostyla** *Warr.* (7 i) is the smallest of the group and the only one yet known from East Africa. Antennal joints of the ♂ slightly projecting, with the ciliation moderate. Hindleg slender, perhaps relatively

a little less long than in *squamulata*, which may possibly, however, prove to be a race of the same species. Kenya Colony (loc. typ.) and Tanganyika Territory.

S. squamulata *Warr.* is less small and somewhat more ochreous than *macrostyla* but otherwise very similar; presubterminal band of forewing more equally developed throughout, whereas in *macrostyla* it is generally posterior only, or chiefly. Leg-structure as in *plesioscotia*. Natal. *squamulata.*

S. hispidata *Warr.*, known only from the type ♀, is recognizable by its glossy whitegrey ground-colour, coarse dark-grey irroration and especially by the unusually proximal position of the lines and the very sinuous subterminal, which between the radials expands greatly on its proximal side. Lines rather thick, sinuous, the median — as in *sinuilinea* — very near the antemedian, the postmedian not far beyond the cell-dot. Underside glossy, almost without markings. Expands 18 mm. Libollo, Angola. *hispidata.*

S. sinuilinea *Prout* (8 i). Less glossy than *hispidata*, generally browner, with the markings more reddish brown, at least in the type. Hindtibia of ♂ rather long, with strong pencils, which partly conceal the short but not minute tarsus. Forewing with median line approximated to antemedian, nearly parallel with it. Hindwing moderately rounded. Transvaal (type), Portuguese East Africa, Orange Free State and Southern Rhodesia. *sinuilinea.*

S. subtorrida *Prout* (8 i). Near *torrida* but somewhat larger, antemedian line of forewing more acutely angled, subterminal shades rather strong, distal margin of hindwing less protuberant, under surface well marked, showing large cell-dots and moderately strong postmedian line. British Somaliland, only the type ♀ known. *subtorrida.*

S. torrida *Warr.* (8 i), also known only from a single ♀, is smaller and less heavily irrorated than *fumilinea*, the forewing with more acute apex. Otherwise similar. Cunene, Angola. *torrida.*

S. prionodonta *Prout* (8 i). Larger and relatively longer-winged than *fumilinea*, paler and with scarcely any black irroration. The principal lines more acutely angulated, the median more distally placed, faint, brownish, on the forewing arising from a black costal spot, very acutely angled outward at the 1st radial, then curving inward to the base of the medians; black dots on fringe intense. Underside very faintly marked, excepting a postmedian costal dot and the fringe-dots. Thies, Senegambia (type); Kete Kratje, W. Togoland, 1 ♀. *prionodonta.*

S. fumilinea *Warr.* (7 i). Antennal ciliation of ♂ long, in fascicles; hindtarsus of ♂ extremely short, tibia shorter and less tufted than in *sinuilinea*. Variable, especially in colour, often more reddish than in that species; further distinguishable therefrom by its still more sinuous and more distally placed median line and its more elongate hindwing (in the middle more strongly convex). Underside in both species glossy and almost unmarked. Transvaal to the Cape, the type from Natal. — f. **confracta** *Prout* (7 k) presents a superficially very different appearance on account of the pale ground-colour and great reduction of the dark irroration. Described from Cape Colony, known also in Natal. *fumilinea.* *confracta.*

S. tristega *Prout* (7 k). Variable is size (14—22 mm) as well as the warmth of the ground-colour, which, however, always shows a decided tinge of reddish or cinnamon-brown. The dark shading between the postmedian and subterminal lines recalls that of the Palaearctic *trigeminata Haw.*, though each pair of "twin" spots is generally more confluent. Face black. ♂ antenna with the joints projecting, bearing rather long fascicles of cilia. ♂ hindleg less short than in *fumilinea*, the tibia heavily scaled above and with a hair-pencil from the femoro-tibial joint, the tarsus quite short (about ⅓). Underside glossy, weakly marked. Madagascar: Diego Suarez. *tristega.*

S. controversata *Prout* (8 i). ♂ antennal cilia about as long as width of shaft, hindtibia rather short, with hair-pencil, tarsus about ½ tibia. Pale fleshy grey, costal margin of forewing reddish ochreous; further differs from the preceding group in its larger size and the extreme weakness of the submarginal shades. Salisbury, Southern Rhodesia. *controversata.*

S. leucorrheuma *Prout* (8 i). Palpus minute. Tongue wanting (?). Antenna rather slender, joints scarcely projecting, ciliation long (about 2). Hindleg slender, short, the tibia and tarsus together very little longer than the femur. Wing whitish, slightly glossy, mostly suffused with mouse-grey, in places with some coarse darker irroration; a narrow band remaining white betweeen median and postmedian lines, the rest of median area intermediate in whiteness; median line thick; subterminal line almost as sinuous as in *fumilinea*, but less thickened. Hindwing with termen strongly convex, the sinuosities rather more pronounced than on forewing; stalking of 2nd subcostal short. Underside similarly but still more sharply marked. Cape Colony: Oudebosch, 1 ♂ in coll. South African Museum. *leucorrheuma.*

S. nasifera *Prout* (8 i) founded on a ♂♀ from Warmberg, Transvaal, is another long-winged species, a good deal smaller than *controversata*, without the ochreous costal margin and best recognized by the *nasifera.*

sharp projection of the postmedian line on the 1st radial. Underside without distinct markings, except the rather large cell-dots.

lipara. **S. lipara** *Prout* (8 l). Affinities uncertain. Rather broad and round-winged, the markings slightly reminiscent of *eugenitta Mill.* (Vol. 4, p. 121); less reddish, the dark irroration red-brown, but very fine and sparse; forewing beneath nearly as above, paler at hindmargin; hindwing beneath more whitish, with cell-dot slightly elongate, postmedian dots feeble. Durban, founded on the ♀.

transcatenulata. **S. transcatenulata** *Rothsch.* (7 k). Narrower winged and brighter buff than *crassisquama* (less dark-irrorated), the first two lines similarly approximated, but rarely connected by band-like shading, the markings of the distal area weak. Hindleg of the ♂ rather weak, but with the tarsus not much shortened. Rharis district.

crassisquama. **S. crassisquama** *Warr.* (8 l), only known from the type ♀, is more glossy and with the proximal markings more recalling *affinitata B.-Haas* from Syria; postmedian line and subterminal shade rather strong, formed of dark irroration. Nakheila, River Atbara, Egyptian Sudan.

microptera. **S. microptera** *Warr.* (8 l), briefly described in Vol. 4, p. 417, is at least as narrow-winged as *transcatenulata*, paler and much smaller, the markings more oblique. Taken with *crassisquama* and since recorded from Kordofan.

granulosa. **S. granulosa** *Warr.* (8 i). Probably not, as I formerly supposed, a form of *microptera*, as the cell is not quite so long, the cell-dots wanting and the principal line more distally placed. Nakheila (type) and in Egypt.

minimaria. **S. minimaria** *Warr.* In size and shape near *granulosa*, rather greyer, the 3 lines of the forewing sinuous, of more equal strength, the postmedian accompanied distally by an ill-defined dark shade or (especially on the hindwing) ending in a dark spot which reaches the anal angle. Underside rather well marked. Hindleg of ♂ short and slender, the tarsus quite short and weak. Mombasa.

bura. **S. bura** *Prout.* 16 mm. Antennal ciliation as long as diameter of shaft. Hindtarsus about ⅓ tibia. Wings rather narrow, whitish, suffused with light sandy brown; cell-dots black; markings cloudy, not very sharply defined; an oblique proximal band, on forewing obsolete anteriorly, a weaker, narrower, more macular subterminal band; postmedian line obsolete above, except as a costal dot, present (but weak) beneath. Kenya Colony: Bura, 1 ♂.

limbolata. **S. limbolata** *Mab.* "14 mm. Wings bone colour, with 2 brown-reddish lines in the proximal part, the inner scarcely sinuate, the outer crenate; cell-dot minute, the outer line almost touching it distally; a broad brownish-rosy band borders the wings, divided by a pale stripe, broader at the apex than posteriorly and on the hindwing; fringe whitish, with a minute black dot at each vein-end. Underside whitish, slightly tinged with rose-colour." Madagascar (?). A worn ♀ in the Tring Museum, apparently close to *marcidaria Walk.* (Ceylon) seems to agree well with this description, which, however, may possibly refer to a ♀ form of *rufimixta Warr.*; *rufimixta* ♀ differs from *marcidaria* in the narrower wings, straigher postmedian line, the dots at base of fringe oftener obsolete, etc.

heres. **S. heres** *Prout* (7 k). Near *associata*, but with the ♂ antennal joints projecting almost as in *echo*; ciliation even, about as long as diameter of shaft. Cell-dots wanting or very faint, the shade just outside the postmedian also obsolescent or very narrow, even the characteristic darkening at the abdominal margin of the hindwing generally scarcely noticeable; a fine, almost straight median line, on the contrary, generally well developed on the forewing. Underside similar to upper, the cell-dots sometimes better expressed. ♀ rather larger than ♂. Wankie, S. Rhodesia. Also known from Kilwa, E. Africa (1 ♀).

associata. **S. associata** *Warr.* (7 k). Structure nearly as in *minimaria*, ♂ hindtibia somewhat more thickened at distal end. Less narrow-winged, more glossy, more stramineous; characterized by the sharply black ante- and postmedian costal dots of the forewing. In the type form the dark postmedian shade is weak, except *exilinota.* at hindmargin. — ab. **exilinota** *Warr.* has more complete postmedian shading. Both forms are best known *subscutulata.* from Natal, but reach the Transvaal and the southern part of Portuguese East Africa. — **subscutulata** *Warr.* is a slightly narrower-winged race from Uganda and the Upper Congo.

echo. **S. echo** *Prout* (7 k) at first sight resembles a slightly broader-winged, weakly marked *associata*, but the ♂ antennal joints have strong angular projections; postmedian line and its costal dot farther from termen, dark shade at hind angle of forewing not developed, forewing beneath more suffused. Areole, so far as I have observed, wanting (in *associata* and *heres* developed). Transvaal.

fortificata. **S. fortificata** *Prout* is larger and with sharper lines than *associata*, the ground-colour more brownish-ochreous, the lines purple-fuscous, thickened at costa, but without the separable black dots of *associata*, the principal dark shading outside the postmedian of the forewing placed between the 3rd radial and 2nd median. Transvaal.

S. poecilocrossa *Prout* (7 k). Easily known by its thick, sinuous postmedian line (placed unusually close to the margin), its delicate violet-grey subterminal shading, warm brown costal edge and fringe, etc. Cell of forewing very long. Hindtibia of ♂ with long, slender pencil, tarsus very short. Madagascar, common at Diego Suarez. *poecilocrossa.*

S. submaculata *Warr.* (7 k). Rather broad-winged, with the abdominal margin of the hindwing relatively longer than in most *Sterrha*. The subterminal markings of the forewing are characteristic, placed somewhat as in *fortificata*, from which it differs in the weaker, straighter, more proximally placed lines as well as the wing-shape. Described from S. Nigeria and distributed as far as French Guinea without variation. *submaculata.*

S. circumsticta *Warr.* (7 k). In shape near *submaculata* but less pale, much more distinctly marked above and especially beneath, where the cell-dots are further enlarged and the median shade strengthened. Further differs in that the subterminal shading of the forewing is weak, between the 3rd radial and the 2nd median not expanded. Fringe with sharp black basal dots. Founded on 2 ♀♀ from Caconda, Angola. *circumsticta.*

S. ascepta *Prout* (7 k). A small and inconspicuous species, recalling the Indian *actiosaria Walk.* though slightly narrower-winged and sometimes more tinged with reddish. Hindleg of ♂ short, without the strong hair-tufts of *acticsaria*. From *Scopula minorata* it is of course distinguishable by the venation and leg-structure. Cape of Good Hope (type locality) and Orange Free State. *ascepta.*

S. carneilinea *Prout* (7 l), founded on a ♀ from Cape Town, differs from *ascepta* in the flesh-pink lines and other details. *carneilinea.*

S. laciniata *Warr.* Very similar to *nitescens* (7 l). Paler, the cell-dots smaller, median and subterminal shades very weak. Shape and structure about the same. Kikuyu Escarpment, 1 ♂. *laciniata.*

S. nitescens *Warr.* (7 l) will very probably prove to be a more irrorated and more sharply marked form of the preceding, which has page-priority. Antennal joints of ♂ slightly projecting, ciliation moderate, ♂ hindleg very short and weak. Described from the Kikuyu Escarpment. A short series from Nairobi shows it to be moderately variable. *nitescens.*

S. consericeata *Prout* (8 k). I formerly supposed that this might be a race of *nitescens*, which it recalls in its tone and strong gloss, but the structure brings it closer to *ascepta* and it may prove to be a pale and very glossy form of that species. Transvaal (type) and Orange Free State. *consericeata.*

S. parallelaria *Warr.* Rather smaller than *nitescens* (7 l), the distal margin slightly more oblique, the lines almost parallel with it, the ground-colour more brownish. Cell-dots minute, placed on the median shade; terminal dashes almost obsolete. Hindleg of ♂ slender, the tarsus long. Kikuyu Escarpment. — **paraplesia** *Prout*, from the Transvaal, may be a rather larger, paler form of the same species, as the lines follow a similar course; but I am not able to study the ♂ structure. Similar forms occur in Rhodesia and Nyasaland and will require study. *parallelaria.* *paraplesia.*

S. lalasaria *Swinh.* (8 k). Antennal joints of ♂ slightly projecting, ciliation a little longer than diameter of shaft; ♂ hindtarsus much shorter than tibia (perhaps ½). Costal margin of forewing curved in distal half, median shade well beyond cell-spot, postmedian line distinct, proximal subterminal moderately so; fringes with a dark line and dark basal spots. Machakos, Kenya Colony. *latasaria.*

S. insularum *Prout* (= rufulata *Warr.*, nom praeocc.) (7 l). Somewhat like the most warmly coloured *ascepta*, on an average smaller and showing a slight tendency to develop the subterminal shading of *tristega* (7 k). Hindleg of ♂ strongly tufted, somewhat as in *actiosaria Walk.* (to be described in Vol. 12). São Thomé and more recently found on Principe. *insularum.*

S. inobtrusa *Warr.*, only known from 4 worn specimens from Warri, S. Nigeria, is evidently nearly related to *insularum* but is much paler. The sole ♀, which is less wasted than the ♂♂, shows moderate subterminal shading and is, both in colour and markings, extremely suggestive of a diminutive *biselata Hufn.* (Vol. 4, p. 126). Possibly a form of the following. *inobtrusa.*

S. pulveraria *Snell.*, founded on a ♀ from Lower Guinea (Congo estuary) has the lines apparently more sinuous or dentate, the subterminal shade on both wings stronger. Forms from the Upper Congo and Uganda seem to agree with it and I suspect that it is widely distributed, but good material is sorely needed. — **subculta** *Prout* (8 k), from Barberton, Transvaal, may probably be a race, or even synonymous, but was also founded on the ♀; except that the postmedian line of the forewing arises from a conspicuous black costal dot which is wanting in Snellen's form, I can point to no significant distinction. — **agrammaria** *Mab.*, from the Comoro Islands and Madagascar may be a pale form of the same species; if I have correctly determined it, the ♂ has a strongly tufted hindleg and the black postmedian costal dot is perhaps the principal distinction from *inobtrusa*. *pulveraria.* *subcutta.* *agrammaria.*

purpurascens. **S. purpurascens** *Prout* (8 k) is a pretty, broad-winged species, quite unlike any other yet known from Africa. Natal: Umkomaas (loc. typ.). Also taken at Makulane, S. Mozambique.

sublimbaria. **S. sublimbaria** *Warr.* (7 l). Known by its curiously irregular and broken lines, dark costal marks and very heavy terminal line. Antennal ciliation of the ♂ rather long. Only known from Natal and Pondoland.

prucholoma. **S. prucholoma** *Prout* is smaller, the antennal ciliation rather short, the hindwing somewhat more rounded, the lines more normal, but very weak, the borders purple-brown rather than blackish and with stronger proximal projections. Uganda (type), Congo and Gold Coast, evidently hitherto much overlooked.

flamingo. **S. flamingo** *Warr.* (8 k). Recognizable by the arched costa and highly oblique, slightly sinuous distal margin of the forewing, which thus approaches that of an Indian group typified by *acuminata Moore*; the hindwing, however, is rather narrow and not bent at the 3rd radial. Luacinga River, Angola, described from 2 ♀♀; since taken at Salisbury, Rhodesia.

tornivestis. **S. tornivestis** *Prout* (7 l). At least as long-winged as *flamingo*, but with the distal margins not sinuous. Pale, not reddish, the postmedian line pretty direct but slight, subterminal shades strong, in the ♀ (here figured) more or less suffusing with the postmedian to form a broad dark border. ♂ hindwing at anal angle and distal part of abdominal margin clothed with long coarse specialised scaling which projects somewhat beneath. Nairobi, the type and others. Also 1 ♀ from Mount Mlanje, 2300 feet.

amputata. **S. amputata** *Warr.* (7 l), on which Warren founded a genus *Cacorista*, has the ♀ rather similar to that of *tornivestis* but smaller, more warmly coloured, with the distal band of the forewing strong, more removed from the margin anteriorly. The ♂, here figured, has the hindmargin of the forewing somewhat produced into a short, rounded flap, to cover a specialised area of the hindwing which — together with the corresponding part of the forewing beneath — is clothed with coarse ochreous scaling. Hindleg of ♂ weak, with very short tarsus. Distributed in W. Africa from Senegal and across Uganda to E. Africa, originally described from Unyoro. The specific identity of the two forms was proved by the late A. Bacot, who bred *rufimixta.* them together from one batch of eggs. — **rufimixta** *Warr.* is almost certainly a more unicolorous aberration *rufifascia.* of *amputata*, though the specialised sex-scaling is less evident. 1 ♂ from Ogruga, Niger. — **rufifascia** *Prout*, from Natal, shows better developed red or purplish lines on the ♂ forewing, the postmedian band-like. Similar forms occur on Madagascar (see our note on *limbolata*).

S. umbricosta is variable, but easily distinguished by its extreme shape, strong silky gloss and especially by the loss of the areole, which leaves the 5 subcostals of the forewing stalked together. — *depleticosta.* **depleticosta** *Prout* (= minimaria *Swinh.*, err. det.), from Kenya Colony, is a small form with the costal margin not, or scarcely, differentiated in colour, the fringe with rather strong dark dots at base. I cannot yet separate the race from Madagascar, except that the costal margin sometimes shows signs of darkening. *umbricosta.* — **umbricosta** *Prout* (7 l). Vertex whiter; costal margin of forewing red-brown, shaded, especially in proximal *punctigera.* half, with fuscous. Transvaal (loc. typ.) and Cape Colony. — ab. **punctigera** *Prout* from Pretoria is very *omoscotia.* distinct in the presence of large black cell-dots. Possibly a separate species. — f. **omoscotia** *Prout*, from Pretoria North, is another rather puzzling form or very close ally, the hindwing apparently a trifle broader, cell-dots present but minute, costal margin not reddened, but with a mixture of lustrous leaden-grey and *ambiscripta.* fuscous scales at base; lines well expressed on underside. — f. **ambiscripta** *Prout*, taken together with the preceding, has strongly expressed lines above as well as beneath.

trissosemia. **S. trissosemia** *Prout.* 15 mm. Venation as in *umbricosta*, shape more normal. Whitish grey, clouded almost throughout with chocolate; cell-dots strong, especially on hindwing; forewing in addition with 2 black costal spots, from which arise the weak ante- and postmedian lines; median line reddish, fine and sinuous; fringe long, proximally reddish with distinct black dots. Umbilo, 1 ♀ in coll. Janse.

aperta. **S. aperta** *Prout* (8 k). Venation as in the two preceding. Tongue slight. Antennal ciliation of ♂ scarcely longer than diameter of shaft. The markings are shown by our figure; the coarse dark irroration is mainly longitudinal in direction. British Somaliland, 1 ♂.

fylloidaria. **S. fylloidaria** *Swinh.* (7 l). Venation normal; tongue short and weak. The wing-shape, coloration, form of the post-median and strongly marked underside are characteristic; postmedian strongly oblique from hindmargin to 1st radial, then very acutely angled and running very obliquely inward, here very weak, but marked on the forewing by a dark costal spot. Kenya Colony.

buchanani. **S. buchanani** *Prout.* Smaller (14 mm), apex of forewing and distal margins somewhat more rounded. Paler grey-brown, not reddish; postmedian line much weaker, about parallel with termen, thus more proximally placed at the angle on 1st radial, which is less extremely acute; subterminal band stronger, approximately parallel with termen; hindwing less contrasted in colour proximally and distally of the postmedian line. Makochia, Damagarim, the type. Two rather larger and less narrow-winged ♀♀ from Sédhiou (Sene-

gal), with the subterminal band apparently rather more sinuous, perhaps represent still another species in this group.

S. malescripta *Warr.* Forewing of the ♀ shaped and coloured about as in *fylloidaria* (7 l) but much more weakly marked, without the highly oblique postmedian line; hindwing better rounded than in *fylloidaria*, less narrow than in *buchanani*, also weakly marked, excepting the dark spot at the hinder end of the subterminal band, the ground-colour little whiter proximally than distally. — **nigrosticta** *Warr.* (7 l), which is almost certainly the ♂ of *malescripta*, has the forewing less long and pointed, the tone scarcely so reddish, the cell-dots and dots at base of fringe strong, generally also a rather broad and conspicuous pale subterminal line. Both types were from Natal. — **benescripta** *Prout*, founded on a ♂ from Rikalla, Portuguese East Africa, is perhaps a mere aberration, perhaps a separate species; rather paler than *nigrosticta*, lines of upperside more strongly developed, not thickened at costa of forewing, median line of both wings finer, cell-dots obsolete, proximal subterminal shade broader, rather more distally placed. *malescripta.* *nigrosticta.* *benescripta.*

S. subterfundata *Prout* (7 l) is larger and paler than *malescripta*, with the postmedian line better developed (less oblique than in *fylloidaria*), the blotch at the anal angle of the hindwing beneath less developed, etc. Southern Rhodesia: Umvuma. *subterfundata.*

S. lycaugidia *Prout* (7 m). 14—18 mm. In shape and general aspect, as well as in having the costal vein of the hindwing anastomasing with the proximal half (or more) of the cell, evidently related to *lilliputaria*; ♂ antennal joints projecting, with paired fascicles of cilia, hindtarsus long. On an average larger than the two following, more *Zygophyxia*-like, the postmedian line of the forewing very oblique, hindwing only with cell-dot and a weak line beyond. Madagascar: Diego Suarez. *lycaugidia.*

S. sympractor *Prout* (7 l), from the same source, expands 13—15 mm and is still nearer to *lilliputaria* in shape and markings, but somewhat browner, with stronger grey irroration or suffusions, the lines commencing from black costal spots. ♂ ciliation rather short, hindtarsus about ½ tibia. Venation as in *lilliputaria*. *sympractor.*

S. lilliputaria *Warr.* (7 m). Hindtibia of ♂ rough, tarsus very short, antennal ciliation decidedly short. Cell-dots obsolescent, lines nearly parallel with distal margin, variable in breadth. Angola (type), Nyasa, Tanganyika Territory and Transvaal. *lilliputaria.*

26. Genus: **Epicleta** *Prout.*

A development of *Sterrha*; or possibly *Cleta*, with the 1st subcostal of the forewing free and only two others present, the 2nd being presumably coincident with the 3rd, the 4th with the 5th. Tongue slight. Antennal ciliation of ♂ long. Hindleg of ♂ aborted, without spurs. Hindwing with 2nd subcostal long-stalked. Only one species known.

E. calidaria *Prout* (8 l). Curiously like *S. fatimata Stgr.* or — in its warmer colouring — a tiny sharply-lined *exilaria Guen.* (see Vol. 4, pl. 4 c), the 2nd and 3rd lines of the forewing almost straight, arising from blacker dots on costa, the subterminal band not sharply defined, its distal boundary sinuous. Transkei, Cape Colony, only 3 known to me, all ♂. *calidaria.*

27. Genus: **Lycaugidia** *Hmpsn.*

Palpus minute. Tongue short and slender. Antenna of ♂ pectinate, with long branches. Hindleg not aborted, the tibia of the ♂ with 1 spur (constant ?), in the ♀ with 2. Wings long and narrow; forewing with double areole, 1st discocellular well developed: hindwing with costal anastomosing to beyond middle of cell, 2nd subcostal shortly stalked. Only one species, which is local (the ♂ extraordinarily scaree) in India and E. Africa.

L. albatus *Swinh.* (7 m). An inconspicuous but easily recognized species, apparently not variable. The longer cells, different subcostal venation of forewing and especially the structure of the head distinguish it from the narrowest-winged African *Eupithecia*, although it was formerly supposed to belong to the same subfamily; cells not quite so long as in *Zygophyxia*, venation of hindwing quite different. Known from some localities in Kenya Colony and the Transvaal. *albatus*

28. Genus: **Pseudosterrha** *Warr.*

This little-studied genus, like the preceding and following, should almost certainly be transferred to the *Sterrhinae*, notwithstanding that the costal vein of the hindwing anastomoses strongly with the cell (about as in *Rhodometra*). Except in this character, it suggests the possibility of a quite near relation-

ship with *Traminda*, but in the absence of clear evidence we leave it next to *Rhodometra*, from which it differs chiefly in the flat face, narrow wings and long cells (see Vol. 4, p. 153). There is only one species, though this has been provisionally separated into 2 races.

philacaria. *Ps. paullula Swinh.*, from the plains of India, will be described in Vol. 12. — **philaearia** *Brabant* (= gayneri *N. C. Rothsch.*) (7 m), described from Egypt, but distributed through the Sudan to Senegambia and to Kenya Colony and Kilimandjaro, is variable, perhaps not racially differentiable; ♀♀ often more weakly marked, but still not so weakly as in the ♂♂.

29. Genus: **Rhodometra** *Meyr.*

A somewhat isolated genus, obviously of African origin, although the genotype is a migrant with a very wide range and a similar species (*antophilaria Hbn.*) inhabits the Mediterranean countries (see Vol. 4, p. 154); much more unaccountably, two or three species are found in South America, chiefly in Ecuador and Peru. On account of the anastomosis of the costal vein of the hindwing with the cell, at least as far as the middle, the more rigid analysts have placed it in the *Larentiinae*, but the genitalia and some points in the forewing venation show it to belong to the *Sterrhinae*. Pierce ("Genit. Geom.") associates it with the *Cosymbia* group, but the "socii", shape of saccus and formation of the valvae seem irreconcilable therewith. Face protuberant, tongue strong, ♂ antenna strongly pectinate, forewing with areole large, simple, 1st discocellular present, hindwing with 2rd subcostal not or only very slightly stalked. Pattern generally quite simple, the hindwing plain white, or dark-grey with ill-defined whitish band.

sacraria. **R. sacraria** *L.* (7 m). Very variable, though most of the extreme aberrations are quite rare (see Vol. 4, p. 154). The name-type is the most usual ♂ form, the forewing yellow, with the oblique stripe
labda. complete, rosy. — ab. **labda** *Cram.* (7 m) is noteworthy as being the usual ♀ form, the forewing less bright, more straw-colour, with the line brownish, generally not quite reaching the hindmargin. Similarly coloured specimens, however, occur occasionally in the ♂. The early stages and habits of *sacraria* are briefly noticed in Vol. 4. Linne's type was from North Africa, but the range covers the whole of the continent, besides much of Europe, western Asia, the Canary Islands and St. Helena.

lucidaria. **R. lucidaria** *Swinh.* (7 m) may perhaps be a form of *plectaria* without the red terminal line, the fringe, on the other hand, tinged with rose-colour. Perhaps the largest *Rhodometra*. Abyssinia, Kenya (loc. typ.), Tanganyika and Nyasaland.

plectaria. **R. plectaria** *Guen.* (8 e). "Larger than *sacraria* (34 mm). Forewing quite triangular, with the margins very straight. The oblique line is always mixed with black: the costa is tinted with rosa throughout, and there are further 3 or 4 unequal marks on the disc, of a dark rose-colour, placed in oblique series between the veins. Fringe preceded by a rosy line. Head and palpus also tinged with rose." Abyssinia.

intervenata. **R. intervenata** *Warr.* (7 m). Smaller than *lucidaria*, with increased longitudinal markings, longer and less oblique streak from apex, red terminal line and clean yellow fringe. Possibly a local race of *plectaria*. Only known from the highlands of Kenya Colony.

partici-
pata. **R. participata** *Walk.* (8 l). A small species, with white cell-spot, very similar on the forewing to *antophilaria Hb.* ab. *subrosearia*, but with the line more oblique and more slender, rather strongly dark-edged
peculiata. proximally, and with the white hindwing almost unmarked. — ab. **peculiata** *Walk.* is a more uniformly reddish aberration, the pale line weak, its proximal edging narrow and grey. Natal. Typical *participata* was described from Namaqualand but is best known in Cape Colony.

audeoudi. **R. audeoudi** *Prout* (8 e). Rather larger, more variegated but without the conspicuous white cell-spot, the tints on the whole duller, the dark oblique streak vertually replacing the whitish one; hindwing greyish. Delagoa Bay district.

satura. **R. satura** *Prout* (8 e) differs from all the other African species by its dark hindwing; from *rosearia Tr.* (Vol. 4, pl. 7 f) by its broader red costal border, more oblique red stripe (broadening the yellow band beyond it posteriorly) and obsoleseence of the pale band of the hindwing. Antennal pectinations of the ♂ a little less long. Delagoa Bay (type), Transvaal and Durban.

4. Subfamily: **Larentiinae.**

Of this subfamily, as of the preceding, a fairly comprehensive account has been given in connection with the Palaearctic fauna (see Vol. 4, p. 152). It was formerly considered to be very poorly represented in the African Region, but the exploration of the higher mountains has yielded many interesting additions; for instance, the "Voyage de Ch. Alluaud et R. Jeannel en Afrique Orientale," of which the *Geometridae* have been recently worked out (Mém. Soc. Zool. Fr. Vol. 39, fasc. 5), has shown just over one-third of the represented species to belong to the *Larentiinae* and almost one-third of the forms in this subfamily to be new. The late Mr. T. A. Barns also made many valuable discoveries and every visit to the higher altitudes of Kilimandjaro, Kenya and Ruwenzori will surely reveal others. At the same time, our definition of the subfamily as consisting of "s m a l l or moderate-sized moths" is probably even more exactly applicable to Africa than to any other region; there is nothing here to approach the *Triphosa* of the Himalayas in size or the *Callipia* of South America in combined size and gaiety of colouring.

In brief, the subfamily is best distinguished by its venation: forewing with 12 veins, almost invariably with one or two areoles, 1st discocellular very short or wanting, 2nd radial pretty normally placed; hindwing with cell more or less shortened, costal vein anastomosing strongly with it or (in some of the *Lobophora* group) connected by a bar nea end of cell. Parttern, at least of forewing, generally consisting of a large number of lines, commonly more or less grouped into bands. Tongue, hindtibial spurs and frenulum nearly always normally developed. ♂ genitalia with gnathos vestigial or wanting, anellus lobes and juxta generally with special developments.

1. Genus: **Eois** *Hb.*

A large genus, of somewhat doubtful position, but having evident affinities with the *Sterrhinae*, to which it may eventually need to be transferred. But for these affinities, its high degrec of specialisation would have involved our placing it at the end, with the *Hydrelia* group. Face smooth. Palpus short. Tongue developed. Legs simple. Both wings with cell short; forewing with areole generally small, occasionally wanting, all the subcostals stalked, the 5th separating before the 1st, 1st discocellular well developed; hindwing with costal anastomosing strongly, 2nd subcostal stalked, 1st median stalked. The genitalia have been little investigated but suggest — like the forewing — a possible relationship to *Anisodes*. Chiefly South American; a sprinkling of species in the Indo-Australian and African regions.

A. Antenna in both sexes simple.

E. oressigenes *Prout* (9 a). Areole fairly large, hindwing exceptional in having the 1st median not stalked. Easily known also by its yellow wings, with rust-red reticulation. Kivu: Nirogongo Volcano, 2800 m. *oressigenes*

E. anisorrhopa *sp. n.* (9 a). Expanse 17—20 mm. Whitc, with black cell-dots and terminal dashes and a characteristic pattern of irregular lines, alternately thick (and brown) and very slender or punctiform (more fuscous), the median of the forewing extremely bent round the cell-dot. Underside more weakly marked. Diego Suarez (G. Melou), 6 ♂♂, 4 ♀♀ in the Tring Museum. *anisorrhopa*

E. innocens *Warr.* (9 a). Less small, hindwing more angled; more suffused, with the median area of the forewing darkened into a band; terminal dashes small and weak. Areole wanting. Kikuyu Escarpment. *innocens.*

E. alticola *Auriv.* (10 a). Rather variable in size and in the ground-colour, which may be either red-brown, as in the type, or dusky drab, as in the specimen here figured. Areole wanting. Retinaculum weak. Antenna of ♂ lamellate, with very short ciliation; otherwise very suggestive, both in shape and markings, of some South American species of the section *Cambogia Guen.*, in which the ♂ is strongly pectinate. Fernando Po, at 3000 feet and upward. *alticola.*

B. Antenna in both sexes bipectinate with strong branches (Pseudasthena Moore).

E. grataria *Walk.* (= pallicinctaria *Walk.*) (9 a). Extremely variable in coloration — dull purple, rosy or even somewhat ochreous, only with slight purplish suffusions in the median area —, but generally recognizable by its shape, its nearly clear yellow fringes and, at least on the forewing, yellow outer spots between the radials. Areole generally wanting. Several aberrations have been named from the Indo-Australian Region, where it has an enormous distribution, and these will be described in Vol. 12. — ab. **mediofusca** *Prout*, described from Pondoland, is a rare form with a complete dark median band. Known African localities for *grataria* are Nigeria to Angola, Uganda, Kenya Colony and Natal; Walker's type was from Ceylon. *grataria.* *mediofusca.*

suarezensis. **E. suarezensis** *Prout* (9 a) is perhaps a race of the preceding, but is superficially similar to the Indian *lunulosa Moore*, though a little smaller, the forewing relatively rather shorter, termen more bent in the middle, tone generally somewhat more reddish, the red lines thicker, more evenly spaced. N. Madagascar.

pyrauges. **E. pyrauges** *Prout* (9 a). Forewing with termen rather more oblique than in *grataria*, not appreciably bent at 3rd radial, hindwing rather less sharply angled than in *grataria*; clear yellow, with bright red markings, producing in parts a salmon-orange colouring; fringes spotted. São Thomé.

diapsis. **E. diapsis** *Prout* (9 a). Also close to *grataria*, forewing with the black cell-dot enlarged into a spot; yellow borders much broader; hindwing more sharply angled than in *grataria*. Keyna Colony and Uganda.

2. Genus: **Xanthorhoë** *Hbn.*

Face with projecting scales or tuft below. Palpus moderate or rather strong, rough-scaled. Antenna of ♂ pectinate or at least dentate or with fascicles of cilia. Leg-structure normal. Wings normally shaped; forewing with areole double; hindwing with discocellulars oblique, 2nd radial generally arising before middle, markings generally weaker than on forewing, but very rarely with strong colour contrast.

An extensive genus and reaching localities so remote as Iceland, Chili, New Zealand, Hawaii, etc. The African species are relatively few.

latissima. **X. latissima** *Prout* (10 a). Recognizable by the unusually broad wings and the shape of the very broad, very dark central band of the forewing. Antennal pectinations scarcely over twice as long as diameter of shaft. Only known from a ♂ collected by T. A. Barns in Central Africa, the exact locality unfortunately not known.

procne. **X. procne** *Fawcett* (9 a). Very variable in coloration, the ♂♂ — as in many *Xanthorhoë* — with the central band of the forewing less broad and more sharply differentiated than the ♀♀, the proximal and distal areas having less dark admixture. Generally distinct from *poseata* in the lack of any green scaling. The ♀♀ might sometimes be confused with those of *exorista*, but have a paler hindwing; generally also more reddish admixture in the central band. Kenya Colony (loc. typ.) and Tanganyika Territory and reaching the adjacent parts of Uganda and Belgian Congo.

poseata. **X. poseata** *Hbn.* (= viridicinctata *Guen.*, penetrata *Walk.*, umbriferata *Walk.*, vividata *Walk.*, rudisaria *Walk.*) (9 b). As variable as *procne*, generally with the pale areas of the forewing green-mixed, the
colorata. median band more fuscous. — ab. **colorata** *Walk.* has the ground-colour more reddish or flesh-coloured, the median band mixed with olive-green. Commonest in Cape Colony, but extending to Natal. Antennal pectinations of ♂ very slender, rather heavily ciliated.

conchata. **X. conchata** *Warr.* (9 b). Intermediate in shape and facies towards *Ortholitha*, to which perhaps it would better be transferred. Face-cone long. Antennal pectinations well separated, continuing only to about 24 joints. Kenya Colony and the adjacent parts of Uganda.

heliopharia. **X. heliopharia** *Swinh.* (9 b). Similar to large *melissaria*, forewing with distal area rather more strongly marked, hindwing with anterior part glossy whitish. Range as that of the preceding.

phyxelia. **X. phyxelia** *sp. n.* (9 b). Expanse 26—30 mm. Represents *heliopharia* and *melissaria* on Madagascar, as is shown by the ♂ antenna and the general habitus. Hindwing darker. Forewing with antemedian slightly more curved, "twin spots" of subterminal at least as well developed as in *heliopharia*; the more sinuous (and sometimes a little dentate) postmedian, the relatively broad brownish stripe between basal and median bands and sometimes the reddish tone of median band begin to recall some forms of *procne*. The type series in Mus. Tring from Station Perinet, 149 km E. of Tananarivo, 20. October—10. November 1930 (Madame N. d'Olsoufieff).

melissaria. **X. melissaria** *Guen.* (9 b). The almost straight distal edge of the central band gives this species a rather charateristic appearance; the hindwing distinguishes it from *heliopharia*, the rather strongly pectinate ♂ antenna from *ansorgei* and *euthytoma*. Rhodesia to Cape Colony, I think also from N. E. Belgian Congo and perhaps Uganda. Guenée's type is labelled "Namaqua", which he calls "Central Africa".

latigrisea. **X. latigrisea** *Warr.*, from Zomba, Nyasaland, may be merely a ♀-form of the preceding, with median and terminal bands darker, but awaits confimatory material from the same locality. It was described as an *Epirrhoé*, the name by which Warren designated *Euphyia*.

borbonicata. **X. borbonicata** *Guen.* (9 b) somewhat more recalls, as its author says, the *Lampropteryx suffumata* of Europe, but is probably a true *Xanthorhoé*, though I only know the ♀. Réunion.

X. eugraphata *Joan.* (9 b) is unknown to me and will possibly prove a race or synonym of *borbonicata*, but the type is somewhat larger and more brightly coloured than the specimens of *borbonicata* before me and — what is probably more significant — with the postmedian line of the forewing less sinuous, more as in *transcissa* except that it lacks the inward tooth at the 5th subcostal. Mauritius. *eugraphata.*

X. transcissa *Warr.* (9 b). ♂ antenna, as in the well-known *fluctuata Linn.*, with 2 pairs of slender pectinations to each joint; the basal moderately long, the distal rudimentary. Named from the median band of the forewing, which in the ♂ is bisected, in the ♀ extremely constricted in the middle. ♂ retinaculum enlarged. Kenya Colony. *transcissa.*

X. scarificata *Prout.* Much like *transcissa* (9 b) ♀; forewing with antemedian line bluntly bent or curved instead of acutely angled at fold, postmedian rather more dentate but less sinuous, subterminal white mark of cellule 3 twice as broad; hindwing with postmedian line appreciably crenulate. Mt. Kenya at 2400 m, 2 ♀♀, collected with a pair of *transcissa*, of which it may conceivably be an extremely dissimilar form, though the wing-shape seems slightly different. *scarificata.*

X. transjugata *Prout* (9 c). Rectinaculum as in *transcissa*, ♂ pectinations closely similar, though I think the primary ones are very slightly less long. Smaller than *transcissa*, especially in the ♂, median band differently shaped, its posterior half often dissolved into waved lines, proximal and distal areas more weakly marked, the sharp white subterminal tooth replaced by a much less conspicuous lunule or dot. Kenya Colony, common in the Kikuyu Escarpment. — **brachytoma** *subsp. n.* has the postmedian line of the forewing rather straighter, the indentation at the 5th subcostal being minute and the central projection suppressed, the lines of the hindwing only developed from abdominal margin to median and its 2nd branch, the anterior part (except for the smoky base and distinct cell-dot) remaining clear, the underside with stronger reddish shades in distal area of both wings, the dark maculation thereon weaker. W. Kivu: Kisiba, Bugoie Forest, 8500 feet, November 1921, 1 ♂ (T. A. Barns). *transjugata.* *brachytoma.*

X. ansorgei *Warr.* (9 c). Near the preceding group, the retinaculum similarly enlarged; ♂ antenna with both pairs of processes short, about equal, terminating in fascicles of cilia. Forewing with boundary of subbasal area angled at cell-fold (in *transjugata* at subcostal), boundaries of median area on an average straighter. Somewhat variable in depth of colouring and strength of subterminal markings. Uganda (loc. typ.) and N. W. Kivu, apparently also on Fernando Po. — f. (? sp. div.) **rubens** *nov.* is so distinct in aspect that I at first took it to be a distinct species; more probably, however, a Mendelian form (cf. *X. ferrugata Cl.*). Prevailing tone brownish and reddish, as against the grey and blackish of typical *ansorgei*, irroration of hindwing and underside rather light pinkish cinnamon than black-grey (especially in the ♂), median band of forewing mikado-brown, central white subterminal spot undeveloped. W. and N. W. Kivu: Upper Lowa Valley, near Masisi, 5000—6000 feet, February 1924, type ♂ and allotype; Lake Mokoto district, 5000—7500 feet, September 1921, 1 ♀. Discovered by T. A. Barns. *ansorgei.* *rubens.*

X. euthytoma *Prout* (10 a). Closely like the straightest-banded *ansorgei*, except in the uniformly darkened terminal area, with extremely slender pale dentate subterminal line. Nigeria (type) and Uganda. *euthytoma.*

X. morosa *sp. n.* (9 c). Smaller than *ansorgei*, antenna with the long fascicles arising from more rudimentary processes. Darker; forewing slightly shorter, without defined pale apical patch or dark subterminal band, basal patch less oblique and more convex, median band recalling some common forms of *transjugata*, being only developed from costa to 3rd radial, subterminal line very fine, slightly interrupted; hindwing with the white line outside the submedian somewhat crenulate. N. W. Kivu: Upper Oso River, 4000 feet, February 1924, 1 ♂ (T. A. Barns). *morosa.*

X. calycopis *sp. n.* (9 c). Expanse 22—24 mm. Recalls *procne* (9 a) but smaller and more delicate, with the pectinations more rudimentary, two fascicle-bearing pairs to each joint, the secondary ones mere processes, placed more ventrad. Forewing suffused with delicate pink; median band moderate, in ♀ broad, in both sexes about twice as broad at costa as at hindmargin; terminal area, except a white-mixed spot at apex, suffused with brown and black; terminal line interrupted at and midway between the veins. Hindwing with the lines very weak, only traceable in posterior part, more strongly marked beneath, having a black cell-dot, the fine lines from base to postmedian complete, the subterminal spots well developed between the radials and near anal angle. N. W. Kivu, 2 ♂♂, 1 ♀, taken with *morosa*. *calycopis.*

X. holophaea *Hmpsn.* (9 c). Palpus rather long and strong. ♂ antenna subserrate, with two pairs of fascicles to each joint. Ground-colour always dusky, markings variable in strength, the median band darker in the ♀♀, its boundary-lines sometimes sharply darkened in the ♂. Sokotra, at 3500 feet. *holophaea.*

X. argenteolineata *Auriv.* (10 a). Variable, especially on the forewing. The figured specimen, from Mt. Kenya, has the white area beyond the central band greatly extended as compared with the type form; the shape of the postmedian is pretty constant, but the antemedian varies in the sharpness of its angulation *argenteolineata.*

at the fold. The yellowish tinge on hindwing and underside will aid recognition. Pectinations quite rudimentary. A high altitude species (2400 m and upwards), described from Kilimandjaro.

trientata. **X. trientata** *Warr.* (♀ = asteria *Fawcett*) (9 c). Very easy to distinguish from *exorista*, its nearest ally, by the much more uniformly coloured proximal area of the forewing and especially by the vinaceous-cinnamon suffusions of the distal area beneath, which show also on that of the hindwing above. Nandi Country and Kikuyu Escarpment.

exorista. **X. exorista** *Prout* (9 c) was formerly confused with the Indian *saturata Guen.*, but is more variegated both above and beneath. ♂ genitalia very distinct, the apex of the valve not bifurcate, the saccus less narrowed, the cornuti less numerous. In both species the ♂ antenna is merely subdentate with pairs of short fascicles. Widely distributed from Abyssinia and Uganda to the Cape, the type from Natal. A ♂ from Banso Mountains, Cameroons, 6000 feet, in my collection, has the band very dark and rather narrow, the subapical patch somewhat extended, and perhaps represents a race.

natalata. **X.** (?) **natalata** *Walk.* (= polyacmaria *Mab.*, vorax *Strand*) (9 d). Closely allied to *stellata Guen.* of America and the Atlantic Islands, scarcely more than a subspecies. On an average larger, but very variable. Systematic position doubtful, the genitalia in several details very dissimilar to those of true *Xanthorhoë*: uncus shortened, bilobed, a free sacculus arm, the calcar undeveloped. The somewhat shortened anastomosis of the costal vein of the hindwing, as well as the pattern, might associate it with *Camptogramma*, but there is little to support this view. Distributed nearly throughout continental Africa south of the Sahara. The larva has
rubritincta. been recorded as very abundant on Bougainvillia in Togoland. — **rubritincta** *Hmps.*, from Sokotra, has the postmedian line more strongly outbent in the middle, the succeeding space somewhat warmer brown, the
constellata. distal area beneath strongly dark. — **constellata** *Warr.*, from Mauritius, is a dark form, with the white lines slight, punctiform. Examples from Madagascar are perhaps intermediate between this and the name-type.

3. Genus: **Polystroma** *Warr.*

Characters of the last section of *Xanthorhoë* (♂ antenna fasciculate), except that the ♂ has a hair-pencil on the forewing beneath, placed nearly as in *Eustroma*, etc. Perhaps better regarded as a further section of *Xanthorhoë*. Besides the African genotype it only includes *adumbrata Koll.* (= *fuscigrisea Hmpsn.*), from the N. W. Himalayas.

subspissata. **P. subspissata** *Warr.* (♀ = brunneitrames *Prout*) (9 d). Generally larger than *X. exorista*, especially in the ♀ (here figured), slightly longer-winged, the forewing with better developed cell-mark and oblique dark apical dash (behind the whitish dash), etc. Natal (loc. typ.), Transvaal and Cape Colony, also (race?) on Madagascar.

4. Genus: **Nycterosea** *Hulst.*

This genus, which has generally been called *Percnoptilota Hulst* or merged in *Orthonama Hb.*, differs from the last section of *Xanthorhoë* and from *Orthonama* in having the 1st median of the hindwing connate or nearly always stalked, not (as in them) separate. The sinuous border of the hindwing, the strong sexual dimorphism and the general habitus, as well as the genitalia, further separate it from *Xanthorhoë*. Only the cosmopolitan type-species is generally known, though Mc. Dunnough has separated off a close ally in Canada.

obstipata. **N. obstipata** *F.* (= fluviata *Hbn.*, gemmata *Hbn.*, angustata *Haw.*, albicinctata *Haw.*, lapillata *Guen.*, baccata *Guen.*, inconspicua *Warr.*, brunneipennis *Hulst*) (Vol. 4, 9 e). We have already given an account of this, the most widely distributed of all the Geometridae, in Vol. 4, p. 228, with characteristic figures of both sexes. Although variable, it is always easy to recognize. Fabricius described it from North Africa, but its
discata. range extends throughout the continent. — ab. **discata** *Warr.* (9 d), from Natal, is a ♂ form with the antemedian band ill-developed, the postmedian line strengthened.

5. Genus: **Ortholitha** *Hbn.*

Very near *Xanthorhoë*, perhaps intergrading (compare *X. conchata*), in the more easily observed characters scarcely differentiable except that the costal margin of the hindwing is considerably longer than the hind-margin of the forewing. The true *Ortholitha* of the Palaearctic region is distinguished also by some features of the genitalia and, according to Walther, the maxillary palpus; but these characters have not yet been tested on the African species. Hindwing generally much more weakly marked than forewing. Some species are included in which the ♂ antenna is simply ciliated.

A. Antenna of ♂ pectinate.

O. cryptospilata *Walk.* (9 d). In shape and in the tone of the underside somewhat reminiscent of the Palaearctic *coelinaria Grasl.*, markings more oblique, no dark apical dash, a large black cell-spot on forewing beneath. Basutoland and Natal to the Cape. *cryptospilata.*

O. cryptocycla *Prout* (9 d). More brownish, postmedian curved near costa, then almost straight, cell-spot beneath still larger. Transvaal. *cryptocycla.*

O. peringueyi *Prout* (9 d). Easily known by its coloration, shape of the median band, subpunctiform subterminal of forewing and rather strong submarginal band of hindwing, especially beneath. Cape Colony. *peringueyi.*

O. subrectiaria *Walk.* (= cidariata *Walk.*) (9 d). Pattern simpler, the white lines neither dentate nor punctiform, the postmedian little bent. Cape Colony and Namaqualand. — **recta** *Prout*, from Madagascar, is somewhat less brownish and has the subbasal and antemedian lines of the forewing almost straight. *subrectiaria.* *recta.*

O. rhiogyra *Prout* (9 e). Again very distinct in the form of the median band of forewing; a conspicuous white dash from apex. Hindwing whitish. Underside as strongly marked as in *peringueyi*, the subterminal bands browner. Kenya Colony (loc. typ.), Tanganyika Territory and S. W. Kivu. *rhiogyra.*

O. ferridotata *Walk.* (9 e). First lines as straight as in *recta*, median band broken into two bars, postmedian line twice incurved, with outward angle behind 3rd radial, a stronger dark apical dash than in *subrectiaria*. Underside weakly marked. Cape Colony. *ferridotata.*

O. deversa *Prout* (9 e). Smaller, with highly characteristic antemedian line, strongly marked hindwing and underside, etc. Described from the Transvaal, but now known from S. Rhodesia to Orange Free State and Natal. *deversa.*

O. horismodes *Prout.* (9 e). Somewhat different in build from any of the preceding, the abdomen rather robust, the oblique and sinuous markings of the forewing somewhat suggesting a *Horisme*. Transvaal; also known from Cape Colony. *horismodes.*

O. crenulimargo *Prout* (9 e) may be known at once by the appreciably crenulate wing-margins. Our figure is somewhat too brightly coloured, but otherwise excellent. Cape Colony. *crenulimargo.*

O. olbia *Prout* (9 e). As the ♂ is still unknown, the exact placing of this species is conjectural. Palpus long and strong. The bright colouring of the forewing, white hindwing and strongly marked underside (the general scheme of the latter as in *rhiogyra*) render it unmistakable. Transvaal. — **parvula** *Prout* is a small race from the mountains of Kenya Colony, with the underside less strongly marked. *olbia.* *parvula.*

O. albodivisaria *Auriv.* is unknown to me. Evidently very similar to *X. conchata* (9 b) but longer-winged, with the postmedian line more sinuous. „Antenna pectinate to ¾, with rather long branches" (Aurivillius in litt.). Kilimandjaro: Kiboscho, 3000 m, only the type known. *albodivisaria.*

O. albiclausa *Warr.* (9 e). An obscure little species, shaped much like *olbia* and with similarly white hindwing, but with forewing much less gay and its markings more recalling those of *Mimoclystia pudicata*. Palpus long, rough-scaled, as in *Xanthorhoë conchata*, towards which it and the preceding species seem to make transitions. Natal (type) and Cape Colony. *albiclausa.*

B. Antenna of ♂ ciliated.

O. limonias *sp. n.* (9 f). Near *olbia* (9 e), palpus less large, coloration less bright, antemedian line much more curved, postmedian only once lobed (without the lobe in cellule 2), a pale subapical dash indicated. Both wings beneath equally coloured, with small but distinct cell-dot and rather strong postmedian line. Perhaps also near *albodivisaria*, but with the ♂ antenna simple. Elanairobi Volcano, 8800 feet, March 1921, open meadows and bush, Arusha District, Tanganyika (T. A. Barns), 1 ♂. *limonias.*

O. lamprammodes *Prout* (9 f). Antenna of ♂ lamellate, with the ciliation very short. Wings remarkably elongate; the markings of the forewing even more oblique than the distal margin, otherwise similar to those of *albiclausa*. The only ♂ before me is brown in tone instead of warm buff. Transvaal (type) and Natal. *lamprammodes.*

O. epipercna *Prout* (9 f). Somewhat like a small dark *peringueyi*, but with quite different ♂ antenna, twice angled antemedian line of forewing, no dark subterminal band on hindwing. Transvaal (type) and Cape. *epipercna.*

O. alumna *Prout* (9 f). As large as *peringueyi*, the rather narrow median area less differentiated from the rest of the forewing than in either that species or *epipercna*, its boundaries much more direct. Probably nearer to *africana*, though slightly less broad-winged. ♂ antenna lamellate, with very short ciliation. Cape Colony. *alumna.*

O. africana *Warr.* Upperside rather less glossy than in *alumna* (9 f), underside still more weakly marked and without the purplish flush which is there noticeable. Median area of forewing less narrow, more mixed *africana.*

with brown. Structure similar, the palpus perhaps a little stronger. Somewhat suggestive of an *Entephria*, as which Warren described it. Cape Colony.

petrogenes. **O. petrogenes** *Prout* (9 f). Although our figure is slightly too broad-winged, this species, like *africana*, presents little of the aspect of typical *Ortholitha*. ♂ antenna with the lamellation deeper than in the two preceding. Forewing more slate-grey, without the brown admixture; subterminal line broken into white spots (in *africana* forming connected lunules); fringe chequered, as also in *africana*, but in that species the dark spots are connected by a thick dark line. Near Cape Town.

6. Genus: **Larentia** *Tr.*

This generic name belongs properly to the Palaearctic *clavaria Haw.* (see Vol. 4, p. 157), but has been applied also to the African species which agree with *Ortholitha* except that the discocellulars of the hindwing are biangulate. As these are not sharply differentiated from a few with somewhat less elongate hindwing (formerly referred to *Colostygia Hbn.* but showing no manifest connection with the type of that genus, *turbata Hbn.*), *Larentia* is here provisionally extended so as to include these latter. Antenna of the ♂ pectinate. As thus extended, the genus has a very wide distribution, including a few Neotropical and Australian species and prevalent in New Zealand.

arenaria. **L. arenaria** *Warr.* (9 f). Only known from the ♀ type, which is in poor condition; distinct from *nictitaria* in its sandy tone, the outward tooth in the middle of the postmedian and the whitish hindwing. Kikuyu Escarpment.

sublesta. **L. sublesta** *Prout.* Expanse 29 mm. Pectinations rather long. Forewing shaped nearly as in *nictitaria* (9 g), slightly more sandy brown, but less so than in *arenaria* (9 f); median area scarcely darkened, containing a small black cell-dot; postmedian line weak, much more sinuous than in the species named, the bisected band beyond pale, but not quite white. Hindwing with termen waved, with an appreciable concavity at cellule 5; impure white; rather glossy, slightly tinged with brown distally; beneath much more irrorated with light brown (almost concolorous with forewing) and with a blackish cell-dot and indistinct, sinuous brown postmedian line. Mt. Kinangop, Aberdare Range, 3100 m, only the type ♂ known.

nictitaria. **L. nictitaria** *H.-Sch.* (9 g). Glossy, indistinctly marked excepting the postmedian and the whitish line or ill-defined band beyond it, but not liable to be confused with any other species. Hindwing beneath less pale, with a more definite subterminal shade. The type form, from the Cape, but extending to Nyasa and Gaza-
cineraria. land, is brownish. — **cineraria** *Auriv.*, from Kilimandjaro, is larger, longer-winged and greyer, with the hindwing above still more weakly marked.

monosticta. **L. monosticta** *Butl.* (= nigrocellata *Warr.*) (9 g). More strongly glossy, more weakly marked, with a characteristic black cell-mark on forewing; hindwing beneath somewhat streaked longitudinally, a little recalling *Osteodes*. Common in the mountains of Kenya Colony and extending to Abyssinia, Uganda and Kilimandjaro.

atrosigillata. **L. atrosigillata** *Walk.* (9 g). Forewing browner, with cell-spot larger, lines well expressed. Hindwing beneath not longitudinally shaded. Namaqualand (type) to Natal and the Cape.

megalaria. **L. megalaria** *Guen.* (= atroclarata *Walk.*) (9 g). Rather variable, but always distinguishable from *atrosigillata* by the more sinuous postmedian line, which, moreover, is little further from the antemedian at costa than at hindmargin. On the whole more strongly marked, the subordinate lines better developed. "Caffraria" (Guenée). Widely distributed from Uganda and Kenya to Angola and the Cape.

dulcis. **L. dulcis** *Butl.* (9 g), from Madagascar, is smaller, the markings of the forewing more band-like, the hindwing more ochreous.

diplocampa. **L. diplocampa** *Prout* (9 g) is broader-winged, the forewing with pattern of close lines and scarcely looks like a *Larentia*. Underside weakly marked, the forewing with a slight subterminal shade, best developed anteriorly. ♂ unknown. Cape Colony.

bitrila. **L. bitrita** *Feld.* (10 a). Conspicuously distinct in the strongly differentiated bands (subbasal and median) of the forewing. ♂ pectinations very short. Cape Colony (loc. typ.), Natal and Transvaal, but never common.

alluaudi. **L. alluaudi** *Prout.* Expanse 38 mm. Antennal pectinations long, rather slender, well separated. Forewing rather glossy, brown; basal patch rather small, its edge curved; median band rather broad, bounded by whitish lines and traversed by 3 irregular dark lines (1 proximal, 2 distal to the small cell-dot); proximal edge of the band strongly indented twice, distal edge with slight subcostal projection and moderate double lobe in middle; a dark-shaded distal band, with the subterminal marked by white teeth between the veins. Hindwing

with distal margin more convex than in typical *Larentia*; glossy brownish white above, the markings very faint, except at abdominal margin; beneath less white, with highly sinuous postmedian line; both wings beneath with a distal band, best developed anteriorly. Kilimandjaro, at 2800—3000 m, only the type ♂ known.

L. heteromorpha *Hmpsn.* (10 a). Variable, but recognizable by the white hindwing, moderate or rather narrow median band of forewing, etc. Ruwenzori, the type at about 1830 m, some aberrant forms from 3050 to beyond 3800 m. Also E. Toro and on Kilimandjaro towards 3000 m. *heteromorpha.*

L. wellsi *Prout* (9 h) is smaller, with both wings dark grey. Only known from very high altitudes on Ruwenzori, 3650 to beyond 4550 m. *wellsi.*

L. hancocki *Prout* (9 h). A larger species (usually 39 mm or more), strongly glossy, grey but not quite so dark as *wellsi*, often more variegated, antenna of ♂ generally with more joints pectinate (about 25—28; in *wellsi* 23 or 24). Ruwenzori, 3650—3800 m (an ab. ? at 3200 m). *hancocki.*

L. barnsi *Prout* (9 h) is similarly marked to *heteromorpha* but strongly ochreous, especially the hindwing. Ruwenzori at 3650 and 4000 m. *barnsi.*

L. phiara *Prout* (9 h). Hindwing almost as clear white as in *heteromorpha*, from which it differs markedly in its stronger gloss, broad median band with sharper central projection distally, more sinuous proximal edge of terminal band, etc. Ruwenzori: E. side of Semliki River, 2300 m. The wings are slightly less elongate than in the 4 preceding, on which account I described it as a *Colostygia*. *phiara.*

L. conchulata *Prout* (9 h). Much smaller, more weakly marked, the lines which border the median area of the forewing much more direct. Except in the biangulate discocellulars of the hindwing it more recalls *X. conchata*, but is rather smaller, slightly shorter-winged, the markings paler and less reddish. Kivu: Niragongo, only the type ♂ known. *conchulata.*

L. vana *Prout* (9 h) differs from all the rest in having lost the pattern of both wings. The glossy whitish of the upperside becomes on the underside (especially of the forewing) strongly suffused with smoke-colour. Locally common in the mountains around Lake Kivu. Sometimes the ♀ is more suffused with pinkish buff and shows traces of dark postmedian and subterminal lines on the forewing. *vana.*

7. Genus: **Gonanticlea** *Swinh.*

A small genus of Indo-Australian and African moths, differing from *Larentia* in the long palpus, non-pectinate ♂ antenna and generally by a distinctive scheme of markings. Wings rather broad, the forewing with the distal margin often slightly (only in the genotype strongly) concave in the anterior half, the hindwing unicolorous grey or ochreous.

G. similata *Auriv.* I have not seen the type of this species, a ♂ from Mt. Meru, 3000—3500 m, but according to the excellent description and figure it is almost exactly like *meridionata* except that the hindwing is coppery and the underside lacks the postmedian line. Perhaps a race thereof. — **animosa** *form. n.* (9 i) is a large broad-winged form from the Kikuyu Escarpment, 6500—9000 feet, underside almost as coppery as the hindwing above, the hindwing beneath with a fine bent postmedian line and traces of a parallel line beyond, the space between them very slightly paler than the rest of the wing. ♀, as usual in the group, without the band-like distal part of the median area of the forewing. Both sexes variable. — *ab.* **fasciata** *ab. n.* has the entire median area unicolorous dark brown; 2 ♂♂, 1♀. *similata.* *animosa.* *fasciata.*

G. carnifasciata *Warr.* (9 i). Smaller, at least as broad-winged as *animosa*, the hindwing with distal margin slightly bent in the middle and of a dark grey colour; median area of forewing suffused with flesh-colour. Uganda. *carnifasciata.*

G. meridionata *Walk.* (♂ = aspersata *Walk.*) (9 i), founded on the ♀, is the only known South African species of the genus. Variable, the median area of the forewing in the ♀ fleshy or grey. Hindwing always dark grey. Cape Colony. Some specimens from Nyasaland, Ruwenzori and Kenya Colony do not seem separable. — **nesaea** *Prout* is a small dark form from Madagascar. *meridionata.* *nesaea.*

G. euthypora *Prout* (10 a). Palpus strong, but scarcely long enough for a true *Gonanticlea*. The (dull) ochreous suffusion chiefly showing on the underside. Distinct in the very broad, distally ill-defined median band, with very straight pale proximal boundary and oblique beginnings of postmedian somewhat as in *obtusa*. Kivu: Virunga Volcanoes. *euthypora.*

G. meruana *Auriv.* Unknown to me, probably a *Gonanticlea*. Expanse 25 mm from tip to tip. Palpus with long bristly scaling. Shape of forewing characteristic, the costa arched at base, then almost straight, apex *meruana.*

acute, termen between apex and 3rd radial straight, then ventricose. In colour and markings almost identical with the following, to which it may prove to sink if the types were rather extreme in shape. Meru 3000—3500 m, a pair.

obtusa. **G. obtusa** *Warr.* (9 i). Smaller than *animosa*, forewing shorter and more unicolorous, hindwing on an average darker. Antennal ciliation of ♂ more minute. Kikuyu Escarpment. Also elsewhere in the mountains of Kenya Colony and on Kilimandjaro.

indentata. **G. indentata** *Warr.* (9 i). Not quite a true *Gonanticlea*, the ♂ antenna with fascicles of cilia, the wings rather more elongate, hindwing with incomplete macular subterminal; both wings beneath with subterminal vein-spots or dots. Kikuyu Escarpment; also the Virunga Volcanoes.

unduligera. **G.** (?) **unduligera** *Auriv.* appears, from the description and figure, to be very like a small dark *indentata*, perhaps still narrower-winged, the hindwing unicolorous black-grey, the underside also lacking the characteristic subterminal; but as Aurivillius describes it as *Cidaria* (in sensu Hmpsn.) I suppose that the hindwing discocellulars are not biangulate. "Antenna of ♂ long-ciliate." Meru, 3000—3500 m, 5 ♂♂.

caesiplaga. **G. caesiplaga** *sp. n.* (~~11 g~~ 10 a). Palpus not extreme, the 3rd joint rather short for a *Gonanticlea*. Antenna with rather long, even ciliation (slightly over 1). Forewing almost as short as in *obtusa*, termen not quite so strongly oblique posteriorly; the colouring and the acute, rather deep indentation (between subcostal and median veins) of the central band proximally separate it essentially from *obtusa*, apart from the very different antenna. Hindwing beneath fuscous with whitish irroration; postmedian line becoming strong posteriorly, angled inward at fold, then very black to 2nd submedian, and accompanied by a pale spot distally; a rather large dark spot between 2nd submedian and abdominal margin close to anal angle. N. W. Kivu: Upper Oso River, 4000 feet, February 1924, 1 ♂ (T. A. Barns).

8. Genus: **Perizoma** *Hbn.*

Following Mc.Dunnough, I temporarily extend the limits of this somewhat specialised Palaearctic genus (see Vol. 4, p. 258, as subgenus) so as to include the species (hitherto little studied) which differ from *Larentia* chiefly in the simple ♂ antenna, from *Gonanticlea* in the less long palpus, different shape and maculation, less unicolorous hindwing, etc. Generally small moths, the hindwing, at least in the African species, approaching the shape of those which we have here referred to *Larentia*.

acme. **P. acme** *Prout* (10 b). Rather long-winged, glossy, the forewing above and the hindwing beneath sharply marked, the oblique white apical dash further enhancing its resemblance to some *Ortholitha*, notably *rhiogyra*. Antemedian line more oblique inward posteriorly, postmedian more acute centrally. Madagascar.

eviscerata. **P. eviscerata** *Warr.* (10 b). Smaller than *inaequata*, the central band of the forewing less straight, less white, postmedian line with additional teeth, especially the one at 1st radial; oblique apical streak wanting. Saldanha Bay, Cape Colony. Janse says the figure is much too yellow-brown and the pale part too dark.

inaequata. **P. inaequata** *Warr.* (9 k). Easily recognizable from the figure. The markings of the forewing, but not the shape, in part recall those of *Gonanticlea* more strongly than is the case with most *Perizoma*. Hindwing beneath more warmly coloured and more strongly marked than above. Cape Colony; ? Pilgrims Rest.

coaequata. **P. coaequata** *sp. n.* (9 i). Close to *inaequata*, of which I formerly supposed it to be a minor geographical modification. It proves, however, to be widely distributed and the differences in markings, though extremely slight, are constant. Slightly shorter-winged, on an average smaller (21—26 mm) and darker-marked; antemedian of forewing with less produced angles, postmedian slightly more crenulate, distal area more confusedly marked. — ab. **cinnamomozona** *ab. n.* looks like a distinct species and may possibly prove so ultimately; median band only at extreme edges remaining fuscous, the rest almost uniform cinnamon or pinkish-cinnamon, cell-dot generally rather weak. Transvaal, the type series (G. v. Son) from Marieps Mtn., in Mus. Tranvaal. The median band varies in width, chiefly according to the sex (in the ♀♀ definitely wider). Except for the rather less extreme markings and more intricate subapical maculation, I would have supposed this to be *eviscerata Warr.*

cinnamomozona.

altipeta. **P. altipeta** *Prout* (9 k). ♂ unknown, but the close resemblance to *inaequata* justifies the assumption that its antenna is simple. Forewing with the pale central band extremely narrowed, the cell-spot enlarged, the subtriangular dark patch near apex more definitely developed. Ruwenzori.

monticolata. **P. monticolata** *Auriv.* Considerably larger (38—42 mm, English measurement), forewing with outer edge of basal patch more angulated, the white postmedian line several times dentate inward, the subterminal line continuing to the costa, here with a larger but ill-defined dark patch on its proximal side, the apical dash less differentiated. Kilimandjaro, 2700—2900 m. — **indivisa** *Auriv.*, regarded as an ab., is "darker coloured, the white transverse line through the middle of the median area is entirely wanting and the two transverse lines before the middle are scarcely indicated". Kilimandjaro: Kiboscho, 3000 m, 1 ♂.

indivisa.

P. sjöstedti *Auriv.*, only known to me from the figure and description, is smaller than *monticolata* (29 mm) and perhaps still nearer to *altipeta* in that the postmedian line is not dentate and the apical dash is well developed; the antemedian line, however, is much straighter, the white central band broader and the hindwing — according to the figure — much more elongate. Kilimandjaro: Kiboscho, 3000—4000 m, 1 ♂, 1 ♀. *sjöstedti.*

P. artifex *Prout* (9 k). The smallest African *Perizoma* and quite unmistakable. ♂ antenna lamellate with strong teeth, which bear tufts of short cilia. Forewing beneath with all the white lines sharply marked anteriorly, blurred posteriorly, hindwing beneath unusually sharply banded, white and fuscous. Cape Town district. — **basutensis** *Prout* is larger (19—20 mm), whiter, median area of forewing much mixed with white, subterminal broad, diffused almost to termen, underside of hindwing with the white bands broader and less irrorated, the dark ones less sharp. Basutoland: Machacha, 10 000 feet. *artifex.* *basutensis.*

9. Genus: **Euphyia** *Hbn.*

This genus was defined in Vol. 4 as follows: "Face commonly with cone of scales. Antenna in ♂ nearly simple. Areole double. Discocellulars (of hindwing) not biangulate. Probably contains some heterogeneous elements, but does not at present seem subdivisible." As thus defined, it contains probably nearly 300 species and is distributed in all the temperate regions and — in a very extensive section with somewhat shorter palpus *(Anapalta Warr.)* — in South America. In Africa it is almost unrepresented.

E. distinctata *Walk.* (= scotosiata *Walk.*, discolorata *Warr.*) (9 k). In shape, and in the coloration of the brightest forms, not unlike the Palaearctic *sandosaria H.-Sch.* (Vol. 4, p. 244), sometimes duller and more greyish; cell-mark of forewing diffuse, about the middle of median band; hindwing weakly marked. Cape Colony. *distinctata.*

E. altispex *Prout* (10 b). A broader-winged, broad-banded species, white and fairly strongly marked, in some respects a little recalling *Larentia phiara*, but with quite different (minutely ciliate) ♂ antenna and non-biangulate discocellulars of the hindwing. The reddish admixture in the median band gives a slight suggestion of *Epirrhoë submaculata*, which is much smaller, with undivided areole. Kivu: Mikeno Mountains, etc. *altispex.*

10. Genus: **Ansorgia** *Warr.*

The only African representative of the interesting *Cataclysme*-group, in which the 5th subcostal of the forewing is widely separate at its origin from the others and usually stalked with the 1st radial. In *Ansorgia* there is no areole, subcostals 1—4 being stalked together, and subcostal 5 is only very shortly stalked with the 1st radial or oftener connate or just separate. Antenna of ♂ simple. Only one species.

A. divergens *Warr.* (9 k). A dull species, but not like any other known to me; in any case determinable by the structure. Uganda. A large ♂ from Kwidgwi I., Lake Kivu, possibly represents a separable race. *divergens.*

11. Genus: **Triphosa** *Steph.*

Palpus longish, rough-scaled. Antenna in both sexes simple (but see *corticearia*). Wings generally glossy, distal margins crenulate, that of the hindwing deeply so; forewing with areole double; hindwing with discocellulars strongly biangulate. The genus is chiefly Palaearctic and Nearctic, but with representatives in the Himalayas and South America, particularly in the Andes. The two African species which, on account of the diagnosis, have been referred here, present a different facies and may probably have had a different origin, at least in the case of *tritocelidata*.

T. corticearia *Auriv.* Expanse 47 mm. Antenna of ♂ pectinate. In wing-breadth, dark colouring, etc., rather similar to the genotype *(dubitata L.)*, but less strongly glossy, the teeth of the hindwing margin rather less strong; postmedian line of forewing without the strong subcostal projection, subterminal not thickened behind 2nd median, termin with sharp white-yellow vein-dots, hindwing with only the postmedian line well developed. Kilimandjaro, 2800—3000 m. *corticearia.*

T. tritocelidaria *Auriv.* (9 k). Narrower winged and with the ♂ antenna broadly lamellate, perhaps originating from the *Ortholitha-Larentia* group. The white in the median area may be restricted to the region of the cell-mark (type) or more extended. Kilimandjaro, 2700—3000 m. *tritocelidaria.*

12. Genus: **Ctenaulis** *Warr.*

In shape and pattern similar to those *Triphosa* in which the margin of the hindwing is the least deeply dentate (particularly *corticearia*). Antenna in both sexes bipectinate. Hindwing with discocellulars not biangulate (Warren's diagnosis is erroneous), the 2nd radial arising at the cell-fold. Perhaps really a derivative of *Ortholitha* or *Xanthorhoë*. Only one species.

albirupta. **C. albirupta** *Warr.* (10 h). Somewhat recalls a lighter *T. corticearia*, the median area relatively darker but without black boundary-lines, the subterminal filled-in proximally with dark spots. Kikuyu Escarpment, only one pair known, the ♀ larger and darker than the ♂ and with the pale, dark-centred subterminal spot of cellule 3 much more conspicuous.

13. Genus: **Conchylia** *Guen.*

Closely related to *Lithostege* and *Chesias* (Vol. 4, pp. 171, 179), the foretibia similarly clawed, the ♂ hindwing with a similar pocket at the base beneath. Face generally less protuberant, palpus somewhat shorter, tongue generally shorter and weaker, antenna of ♂ — except in a few species — pectinate, hindwing of the ♂ — except in *sesquifascia* — with the 2nd median vein running to anal angle, not to middle of inner margin. In the genotype *(ditissimaria)* and some others, the white ground-colour of the forewing is strongly nacreous. The genus is exclusively African, chiefly South African.

alternata. **C. alternata** *Warr.* (= argenteofasciata *Weym.*) (10 b). Very distinct in its less narrowed wings, the 4 parallel brown bands on the nacreous white forewing, etc. Antenna of ♂ simple, lamellate. Angola. Constitutes the type of Weymer's genus *Callythria*.

lamellata. **C. lamellata** *Prout* (10 b). In markings closely similar to *nitidula* (10 c), but with the ♂ antenna lamellate, not pectinate. The brown lines are rather slenderer. The forewing has almost the same strong pearly gloss as in the *nitidula* group. Port Elizabeth.

actena. **C. actena** *Prout* (10 b). Antenna of the ♂ nearly as in the preceding species. The white forewing glossy, but less intensely, the markings nearly as in *irene* (10 b). Cape Colony: Fraserburg.

irene. **C. irene** *Prout* (10 b). In this and all the succeeding species of the genus the ♂ antenna is pectinate. The hindwing shows a broad, though faint, brownish border. Foot of Nieuwveld Mountains, Cape Colony.

decorata. **C. decorata** *Warr.* (10 c). A pretty and unmistakable species, known by the irregular edges of the brown bands, etc. Orange Free State. Also known from Cape Colony.

sesquifascia. **C. sesquifascia** *Prout* (10 c). Smaller and much browner than *actena* and *irene*, the bands edged with white, the incomplete proximal one not, or scarcely, more oblique than the distal. Transvaal and Orange Free State. — *canescens.* **canescens** *Prout* (10 c) is still smaller, paler, more weakly marked. S. W. Africa, Kuruman and Angola. The genitalia indicate a distinct species.

interstincta. **C. interstincta** *Prout*, founded on 2 ♀♀ from Uaso Nyiro, Kenya (W. N. van Someren), has the dark bands more mixed with orange than in *canescens*, the outer one throwing out broad distal projections between the veins. The type has less strong dark suffusiens between the bands than the paratype here figured.

lapsicolumna. **C. lapsicolumna** *Prout* (10 c). Bands of forewing broader and much brighter brown than in *irene*, finely dark-edged, a subterminal shade indicated. Hindwing somewhat irrorated with brown. Transvaal. Some slightly modified forms from S. Rhodesia, the Kalahari Desert and S. W. Africa will perhaps represent separable races.

pactolaria. **C. pactolaria** *Wllgrn.* (10 c). Forewing strongly nacreous, the bands still brighter than in *lapsicolumna* (more yellow), the antemedian more broken near its anterior end, the postmedian running to the apex. Hindwing white. Transvaal. Also occurs in Southern Rhodesia.

ditissimaria. **C. ditissimaria** *Guen.* (10 c). Pectinations of ♂ long. Somewhat variable, the outer band always much straighter than in the 3 species which follow. Hindwing of ♀ white, of ♂ generally rather strongly smoky. The type from "Caffraria", the known range from Cape Colony to Transvaal.

rhabdocampa. **C. rhabdocampa** *sp. n.* (10 c). Very like *ditissimaria*, the pectinations not quite so long, the first band arising closer to the base and running more parallel with costa, the outer band curved posteriorly, the hindwing in the ♂ less dark, generally showing traces of a postmedian band, in the ♀ less white. Cape Colony: Annshaw (Miss F. Barrett) 8 ♂♂ and 1 ♀ in Mus. Brit., including the type; others in my collection.

nitidula. **C. nitidula** *Stoll* (= nitidularia *Guen.*) (10 c.) Pectinations much shorter, bands more slender, the outer more sharply bent than in *rhabdocampa*, then running baseward. Cape Colony; ? Natal.

frosinaria. **C. frosinaria** *Stoll* (10 d). Generally rather larger, the bands more sinuous or dentate, an additional dark mark between them. Cape Colony. Also from Okiep, S. W. Protectorate.

gamma. **C. gamma** (10 d) differs in the form of the brown bars, which constitute, when viewed from the apex of the right wing, a Greek Gamma. Bushman Land, 1 ♀.

14. Genus: **Loxofidonia** *Pack.*

Characters of *Xanthorhoë*, but with the areole undivided. A similar range of variation obtains in respect of the length of the palpus and of the pectinations of the ♂ antenna. In the type species, *L. acidaliata Pack.* from Colorado, both are rather long. The genus is a small one, but known from Africa, India, China, Japan, Formosa and New Zealand. Probably it has been independently evolved from different sections of *Xanthorhoë* and perhaps from *Ortholitha*.

L. (?) bergeri *Gaede.* On a brief examination of the type of this species, a ♀ from Kitumu, S. Kenya, (described as *Eupithecia*!) I took it to be a rather darker, less glossy, race or close relative of *explanata*, but I cannot feel sure that it may not prove to be an *Epirrhoë* (♂ antenna simple), near *edelsteni Prout.* "23 mm" (tip to tip). Forewings with basal area grey brown; from 1/5 costa to 1/4 inner margin a lighter brown band; a second, wavy, from 3/4 costa to 2/3 inner margin, with a projection behind vein 5, culminating in cellule 3; median area somewhat brown, containing one inner and two outer darker lines; cell-spot small; distal area in anterior half somewhat darker, with an oblique light subapical streak, the twin spots at the radials small, black. Hindwing grey-brown, without cell-dot; 2 faint dark lines, the postmedian light band more distinct. Underside with both cell-dots sharp, light band distinct. *bergeri.*

L. explanata *Walk.* (= coarctata *Walk.*, euboliata *Walk.*, pallidata *Walk.*) (10 d). In the glossy forewing, weakly marked hindwing and to some extent the shape of the latter rather like some *Ortholitha*, but easily known by its venation. Both wings beneath sharply marked. South Africa, common in Cape Colony and extending northward through Nyasaland to the north end of the lake (Kondeland). *explanata.*

L. sylvicultrix *Wllgrn.* I have not seen the type, a ♀ from "E. Caffraria." "Wings above ferruginous-tinted, cell-dot fuscous, a common sinuous line white, another at the distal margin black; forewing at distal margin infuscated, with an ill-defined spot and waved subterminal line, cut short posteriorly, whitish; both wings beneath whitish, in fuscated, with a sinuous band beyond the middle, a cell-dot and the outer margin fuscous." The detailed description which follows fits so accurately to *explanata* that I suspect it may have to sink, though the absence of apical dash and the more fuscous-marked underside may point to a link with the following species. *sylvicultrix.*

L. mermera *sp. n.* (10 d). Forewing shaped as in *explanata* and with similar gloss; darker, the median area without the reddish tone, the oblique pale apical dash virtually wanting, proximal boundary-line of median band not sharp, the median band little narrower at hindmargin than at costa (but so, too, in a few *explanata*), scarcely pale in middle (also a variable character in *explanata*), the white distal boundary-line rather noticeably denticulate near costa, otherwise as in normal *explanata.* Hindwing, especially in the ♂, with the termen appreciably more subcrenulate between the 1st radial and the 1st median than in *explanata*; postmedian line much less bent, at costa well proximal to the hinder end of that of forewing, at radial fold more than twice (in ♂ 3 times) as far from the termen as from the cell-spot. Underside with subterminal band heavy, much less reddish than in *explanata.* Pretoria and Pretoria North, type in the Transvaal Museum. Can hardly be a form of *explanata*, as the pectinations seem a trifle shorter, indeed they almost certainly commence so, but most of the critical ones are curved in such a way as to preclude exact measurement. *mermera.*

L. alticola *Auriv.* (10 d). Much smaller than the rest, each joint of the ♂ antenna bearing 2 pairs of pectinations; retinaculum of ♂ very loosely formed, though I do not agree with Aurivillius that it is actually "wanting". Variable in size, also in the colour of the band (reddish brown or fuscous), but not likely to be confused with any other known species. Underside with somewhat macular distal area, recalling that of *Epirrhoë submaculata.* Fernando Po, at 3000 feet and upwards. *alticola.*

15. Genus: **Pseudochesias** *Prout*

This genus, recently erected for the single species, *neddaria*, which *Swinhoe* quite erroneously placed in *Chesias*, bears about the same relation to *Epirrhoë* as *Ortholitha* to *Xanthorhoë*, differing chiefly in its elongate wings and glossy scaling.

Ps. neddaria *Swinh.* (10 d). Recognizable at a glance by its peculiar markings, as well as by its shape and structure. Only known from Kenya Colony. *neddaria.*

16. Genus: **Epirrhoë** *Hbn.*

Characters of *Loxofidonia* but with simple, not pectinate, ♂ antenna. From *Mimoclystia* it differs in the almost straight and oblique, not biangulate, discocellulars of the hindwing, with the 2nd radial arising at the cell-fold or even in front thereof. Erected for Palaearctic species, this genus of perhaps 30 species has been

found to include a few from North America, a few from West China and the following stragglers in Africa; one from S. E. Brazil is more doubtfully placed.

euthygramma. **E. euthygramma** *Prout* (10 d). Sufficiently characterized by the nearly straight median band of the forewing; the white apical dash seems constant, but the mid-terminal spot is sometimes obsolescent. N. Kivu, chiefly from the Birunga Volcanoes. A specimen from Ruwenzori possibly represents a different race, rather large, with hindwing unusually white; scarcely an ab. of *thermochroa?*

thermochroa. **E. thermochroa** *Hmpsn.* (10 e). Near *euthygramma*, the band still broader, less solid, the wing-pattern altogether more dissolved into lines, the coloration different, though the weakest-marked *euthygramma* somewhat approach it. Ruwenzori: Mubuku Valley, 6000 feet, only the type ♂ known.

achalina. **E. achatina** *Prout* (10 e). Smaller than *thermochroa*, less broad-winged, median band similarly coloured, less broad, its distal edge more sinuous. Hindwing rather long and narrow for an *Epirrhoë*, but I do not think it could be transferred to *Pseudochesias*. Basutoland (type) and Orange Free State; ? Nyasaland.

edelsteni. **E. edelsteni** *Prout* (10 e). Browner and more uniformly coloured than *achatina*, more recalling *Mimoclystia undulosata* though less reddish. Underside a little greyer and less uniform than upper, the proximal and median areas showing more distinct alternations of dark and pale lines, the double, pale postmedian band also distinct. Orange Free State: Thaba'nchu. Also known from Bloemfontein, Deelfontein and (?) Bushmanland.

submaculata. **E. submaculata** *Warr.* (10 e). The broad median band shows a much stronger central projection than in either of the preceding, the underside bears rather conspicuous blackish maculation proximally to the subterminal, particularly a conspicuous blotch between the radials. Highlands of Kenya Colony.

consors. **E. consors** *sp. n.* (10 e). Darker than *achatina*, forewing with distal margin appreciably bent in the middle, the apical dash (especially beneath) with dark clouding behind, the subterminal line more broken, with somewhat wedge-shaped mark between 3rd radial and 1st median; hindwing beneath with cell-dot enlarged, subterminal dark shade forming a blotch between the radials. Perhaps nearer to *submaculata*, especially beneath; somewhat more glossy, hindwing above more strongly marked, forewing more highly coloured, with quite different postmedian lines. Nairobi, June 1927 (D. M. Hopkins), 2 ♀♀ in the Tring Museum.

rhodopnoa. **E. rhodopnoa** *Prout* (10 e) has more the aspect of some Palaearctic *Epirrhoë*, the median band sharply contrasted with the extended whitish area beyond, on which stand costal and terminal marks much as in *galiata Schiff.* but much more developed towards hind angle. A slight rosy flush and the posterior furcation or widening of the median band are characteristic. Madagascar.

ericinellae. **E.** (?) **ericinellae** *Auriv.* Systematic position uncertain; face too obliquely sloping for a *Hydrelia* (in which genus it was described), too much roughened at lower edge, palpus too long and heavy (almost 2), areole larger, with both the 1st and the 5th subcostal arising well before its end. Thus agrees with the general characters of *Epirrhoë* though the hindwing is rather narrow and the habitus totally different. "15 mm." (tip to tip), bright yellow, almost gold-yellow, the forewing above with distal half dark red-brown, beneath with the brown more restricted, the hindwing unicolorous, the fringes blackish. Kilimandjaro, 3000—4000 m, flying among *Ericinella.*

17. Genus: **Mimoclystia** *Warr.*

Evidently nearly related to *Epirrhoë*, or at least to the African members thereof. Differs in that the discocellulars of the hindwing are biangulate, though less extremely, as a rule, than in the Palaearctic *Eulype* (Vol. 4, p. 254), which further differs in the small eye, the continuation on the hindwing of the strong pattern of the forewing and other details. *Mimoclystia*, as at present constituted, is exclusively African.

tepescens. **M. tepescens** *Prout* (10 f) differs from the genotype *undulosata* in the total absence of red shades, the markings being brownish-grey just as in the European *Euphyia scripturata* (Vol. 4, pl. 9 k). Forewing with median band perhaps a little more distally placed than in *undulosata*, the succeeding pale band more strongly developed, the hindwing fairly sharply marked. Rhodesia (type) and Angola.

undulosata. **M. undulosata** *Warr.* (10 f). See above for comparisons with *tepescens* and with *Epirrhoë edelsteni*. *Euphyia distinctata*, to the reddest forms of which it also bears a good deal of resemblance, is of course distinguished by the venation of both wings. Cape Colony and extending to the Transvaal.

deplanata. **M. deplanata** *Joan.* (10 f). Well described and figured (uncoloured) by its author, but unfortunately he omitted to examine the venation. By its resemblance to *Loxofidonia* but with the ♂ antenna "very shortly ciliated" it evidently belongs in this neighbourhood; and as specimens from Central Abyssinia (one of which is here figured) agree excellently, except that the type ♂ from Eritrea seems to have had rather paler and weaker-marked distal area and hindwing, we are probably safe in referring it here. If the determination is correct, the ♂ antennal ciliation is not only "very short" but absolutely minute (¼ or less).

M. thorenaria *Swinh.* (10 f) has a rather extreme *Ortholitha*-shape and the postmedian line shaped much as in *O. deversa*, or a little more extreme than in any *L. explanata*, the hindwing with a decided tinge of ochre. Hindwing beneath, with costal and apical parts of forewing, very gay, a blend of orange and red, with whitish markings, the postmedian of the hindwing with a strong projection between the 3rd radial and 1st median. Madagascar. *thorenaria.*

M. annulifera *Warr.* (10 f). A little larger than most *Mimoclystia*, decidedly variable, but easily distinguished from all the preceding by the whitish, almost unmarked upperside of the hindwing; from *cancellata*, which alone resembles it in this respect, by the shape of the postmedian. The typical form, from the Kikuyu Escarpment, is similarly coloured to *cancellata;* forms from Mounts Kenya, Aberdare and Kilimandjaro are more warmly coloured, the underside with a reddish admixture. Also known from Marungu Plateau, S. W. of Lake Tanganyika. Janse adds Umtali (S. Rhodesia) and Impetyeni Forest, Durban. *annulifera.*

M. cancellata *Warr.* (10 f). Rather smaller than *annulifera*, postmedian line of both wings (on the hindwing only distinct beneath) straighter than in any other known *Mimoclystia*. Unyoro (type), Kenya Colony and Kilimandjaro. *cancellata.*

M. pudicata is variable, but always unmistakable through the bright yellow hindwing, both above and beneath; the numerous almost straight lines of the forewing are also characteristic for most of the forms. — **pudicata** *Walk.* (10 g), the name-typical race from Cape Town and Knysna, has the forewing strongly suffused with brownish vinaceous and the lines comparatively weak. — **quaggaria** *Wllgrn.* (= semiflavata *Warr.*) is intermediate in colour and in the strength of the markings between *pudicata* and *multilinearia*. Eastern Cape Colony to South Rhodesia. — **multilinearia** *Swinh.* (10 g) is paler, the forewing with stronger lines, the postmedian perhaps less crenulate; the hindwing often shows traces of the postmedian on the upperside. Kenya Colony, perhaps not separable from the following, of which I have seen scarcely any material. — **cecchii** *Oberth.*, from S. Abyssinia, is certainly close to *multilinearia*, but reverts in colour towards some *quaggaria*, being "reddish brown", indeed an Abyssinian ♀ before me is somewhat darker than Transvaal forms; rather large, median area of forewing fairly broad, the postmedian non-crenulate, the subordinate lines weakly developed; "fringe rosy". *pudicata. quaggaria. multilinearia. cecchii.*

18. Genus: **Eccymatoge** *Prout*

A small genus, erected to accommodate a few Australian and African species which deviate from *Horisme* in having the discocellulars of the hindwing biangulate, with the 2nd radial arising nearer to the 3rd than to the 1st. Except in the wing-shape — apex of forewing not produced, termen of hingwing dentate —, the raised cell-dot of the forewing and the rather more strongly crested abdomen, it scarcely differs structurally from the Palaearctic *Coenocalpe* (Vol. 4, p. 300). The genotype, *callizona Lower*, is Australian.

E. melanoterma *Prout.* ♂, 26 mm. Palpus quite moderate. Antennal ciliation minute. Forewing shaped as in a moderately elongate *Eupithecia*, red-brown, with costal edge darkened excepting the distal third, a black terminal line, the cell-spot large, elongate, the numerous lines indistinct. Hindwing with costal margin rather long and very straight; slightly paler than forewing and weaker-marked, except at abdominal margin. Recalls a *Collix* on the upperside, but has not the sharply-marked underside which characterizes most species of that genus. Transvaal to the Cape, imperfectly known; either variable or comprising more than one species. *melanoterma.*

19. Genus: **Collix** *Guen.*

An interesting genus, distributed throughout the Indo-Australian Region as far eastward as Fiji and — though sparingly — in Tropical and South Africa. In the raised cell-spot and double areole of the forewing and in the dentate or crenulate hindwing it agrees with the preceding, but it is very distinct in the long palpus, the simple discocellulars of the hindwing, etc. Very generally there are also outstanding characteristics, at least in the ♂ — antenna laterally compressed, abdomen with the posterior segments tufted laterally, mid tibia strongly dilated, more or less hollowed, commonly with a groove or furrow on the outerside. Finally, the wings are generally much more strongly marked beneath than above, the pale or whitish ground-colour being marked with broad longitudinal streaks and (often macular) transverse bands. Between 20 and 30 species are at present known; of those mentioned in Volume 4, only *hypospilata* is really a *Collix*.

C. inaequata *Guen.* (= flavipuncta *Warr.*) (10 g). Dark markings indistinct above, moderate beneath. Recognizable at once by the large yellowish subterminal spot between the 3rd radial and 1st median of each wing. Underside with the longitudinal streaks undeveloped, the bands (postmedian and subterminal) scarcely at all macular. Réunion (type) and Mauritius. *inaequata.*

C. foraminata *Guen.* (10 g). Bands better developed above than in *inaequata*, closely like those of a number of the Indo-Australian species, the subterminal band interrupted, but with the pale spot behind the 3rd radial not differentiated from the ground-colour. We figure the underside, which gives a very good idea *foraminata.*

of a normal *Collix*. Described from "Central Africa" (by which Guenée always means Namaqualand!), but apparently very widely distributed from W. Africa to Zululand and Madagascar, though generally taken singly.

psephena. **C. psephena** *Prout* (10 g), from São Thomé, is much like a darker *foraminata*, the underside with the markings a little narrower anch weaker. In the darkest ♀♀ the pale subterminal spots stand out almost as in *flavipuncta*, though that of the hindwing is narrowed. Structurally distinct from both the preceding in that the ♂ midtibia is scarcely dilated.

20. Genus: **Piercia** *Janse*

Face with appressed scales, a very slight cone at lower edge. Palpus moderate or rather long, 2nd joint heavily clothed. Antenna in ♂ ciliated, generally in fascicles (in *bryophilaria* and *cidariata* slenderly pectinate). Hindtibia in both sexes with all spurs. Thorax with the posterior double tuft well developed; abdomen somewhat crested virtually throughout. Forewing with cell about ½, discocellulars normal, areole double or single. Hindwing fairly ample (relatively larger than in *Eupithecia*): discocellulars oblique, often more or less biangulate, 2nd radial about central (in the *perizomoides* group somewhat before middle).

Type of the genus: *prasinaria Warr. (Epirrhoë)*.

This genus appears necessary for the reception of a number of species, chiefly African, which (on account of their variable venation) have been dispersed between *Coenotephria* and *Eupithecia*, or quite doubtfully placed. From *Eupithecia*, with which they share several superficial characters, they differ in shape and general habitus and especially in the genitalia, which lack most of the special features of that genus, in particular the labides and the body-plate; the coremata, moreover, are on the 7th segment, the valve has a strongly differentiated costa and there are, at least generally, paired curved bristles or "hooks" arising from near its base or from the anellus. Hindwing weakly marked, not concolorous with forewing.

The nearest relatives are the Indo-Australian *Xenoclystia* and *Desmoclystia*, but at least one Indian species *(mononyssa Prout*, described as *Coenotephria)* is a veritable *Piercia*.

respondens. **P. respondens** *Prout* (10 g). Evidently variable, but easily distinguishable from *prasinaria* by its longer wings, paler hindwing (with more biangulate discocellulars) differently shaped median band of forewing and generally the paler and less decided green of the ground-colour. Areole double; antennal ciliation slightly longer than diameter of shaft. Cape Town and Stellenbosch.

prasinaria. **P. prasinaria** *Warr.* (10 h). It is not yet quite certain that the species which has subsequently been identified with this is absolutely the same as the original, which we here figure, unfortunately a rather small ♀ from Kilimandjaro; it might conceivably prove an aberration of the closely related and extremely variable *subrufaria*. The specics which passes for *prasinaria* is locally abundant in Kenya Colony and reaches Nyasa and even, I believe, Barberton, Transvaal. Antennal ciliation about as in *respondens*, areole occasionally undivided, discocellulars not or scarcely angulated.

chlorostola. **P. chlorostola** *Hmpsn.* (10 h). Imperfectly known, the ♂ type being the only example yet received from Ruwenzori. I have suggested that it might possibly be an aberration of *subrufaria*, but do not think it probable; antenna similar, discocellulars of hindwing appreciably biangulate. The bright verdigris-green forewing has only a few scattered brown scales to dull it, the cell-dot obsolescent, the hindwing is pale with a decided buff tinge, thus intermediate between those of *prasinaria* and *subrufaria*, though nearer to the former. Underside fairly well marked, but without the strong subterminal shade of *subterlimbata* and some *prasinaria*. A pair from Lake Mokoto district, N. W. Kivu, 5000—7500 feet (T. A. Barns) perhaps represent a smaller race, with slightly more fleshy-tinted hindwing, but differ considerably on the forewing from one another and from the type; moreover the ♂ has the discocellulars scarcely biangulate, thus they may be *subrufaria* forms.

subrufaria. **P. subrufaria** *Warr.* (10 h). Confusingly similar to *prasinaria*. ♂ ciliation 1½; areole, so far as I know, always double, the dividing wall rather strongly oblique; hindwing beneath more uniformly coloured, buff or brownish (in *prasinaria* paler proximally than distally). On an average smaller and with the forewing paler green, with narrower central band, the cell-spot large, the discocellulars of the hindwing perhaps less strongly oblique. Kenya and perhaps Tanganyika Territory, excessively variable, some aberrations showing much red-brown admixture.

vittata. **P. vittata** *Janse.* 28—30 mm. Palpus rostriform, fuscous-scaled. Antennal ciliation of ♂ short. Abdomen with a metallic brown tuft of scales. Forewing moss-green, with the markings fuscous, subterminal line pale green, zigzag, typically with the "twin spots" at the radials fuscous-black; said to be distinguishable from that of *prasinaria* by the shape of the postmedian line, which arises at ⅔ costa, is ill-defined in places, irregular, forewing a small tooth at 1st radial and a longer one at 3rd radial, then incurved to beyond ⅔ hindmargin. Hindwing "tilleul-buff", cell-spot present, the whole area proximal to the postmedian and distal to the subterminal tinged with pale drab, leaving a characteristic pale curved band between. Durban and Impetyeni Forest. The areole of the forewing in simple; 2nd radial of hindwing about central.

P. ciliata *Janse.* 25—27 mm. Palpus twice as long as diameter of eye. ♂ antenna biserrate and bi- *ciliata.*
ciliate, the cilia a little longer than diameter of shaft. Ground-colour "tilleul-buff", body and forewing tinged with olive, hindwing with vinaceous. Forewing densely irrorated with fuscous-black; markings black or blackish; antemedian curved, succeeded by a band-like shade, to which follows the cell-dot; median indistinct, narrow, crenulate, excurved anteriorly, incurved posteriorly; postmedian well-defined exteriorly by the cessation of black irroration, oblique and straight from ⅔ costa to before middle of 3rd radial, then zigzagged and incurved; subterminal olive-buff, zigzag, preceded by a triangular brown costal spot and an irregular black mark at the radials; termen with paired black dots at the veins. Hindwing with indications of a postmedian line, beneath also of median and subterminal. A yellowish tinge on the underside of this wing, on that of the forewing restricted to the costa and veins. Impetyeni Forest (102) typ.) and Oudebosch (Caledon district). Unknown to me.

P. ansorgei *B.-Bak.* (10 h). Similar to *subterlimbata*, (10 i) but with the areole usually double (the proximal *ansorgei.*
areole however, at least in the type, quite small), the boundary of the basal patch apparently more sinuous, excurved between the median and the 2nd submedian, the central band not so strongly broadened anteriorly. the hindwing almost entirely darkened, the underside also strongly dark-suffused, excepting a light cream-buff postmedian band. Antennal ciliation of ♂ scarcely longer than diameter of shaft; discocellulars of hindwing scarcely biangulate. Angola (the type), S. Cameroons, N. W. Kivu and Uganda; a form (?) from Rau, Nandi Country, is rather narrow-banded and has the areole simple.

P. spatiosata *Walk.* (= priscata *Walk.*, despectata *Walk.*) (10 h). Fairly easy to recognize by the *spatiosata.*
shape of the broad median area, entire absence of green scaling and generally the straightish dark antemedian bar. Hindwing with discocellulars more or less biangulate; pale, with ill-defined brownish border. Cape Colony to the Transvaal and again in Kenya Colony, where the forms are perhaps a little smaller and less strongly marked and have the areole often simple, whereas in perhaps 75 per cent of the S. African it is double.

P. fumitacta *Warr.* (10 i). Closely similar to the preceding, possibly a dingy form of it, perhaps rather *fumitacta.*
smaller, the hindwing darker, the forewing sometimes with some green scaling intermixed. Areole simple, as in E. African ♀♀ of *spatiosata*; discocellulars about as in *spatiosata*. Kenya Colony.

P. subterlimbata *Prout* (10 i). Median area of forewing nearly as broad anteriorly as in *spatiosata* but *subterlimbata.*
with the course of the postmedian line in its anterior half more direct, the coloration quite different, the underside with the distal area strongly darkened. Natal (type) and Pondoland and distributed (perhaps with some racial differences) to Belgian Congo and Abyssinia. In the S. African the areole seems to be always simple, as also in similar examples from Mt. Mlanje, Kilimandjaro and Abyssinia; but I refer here provisionally some double-areole forms. In genitalia close to *prasinaria.*

P. olivata *Janse.* 17—20 mm. Antenna of the ♂ with ciliation about as long as diameter of shaft. *olivata.*
Palpus about twice diameter of eye; white beneath. Body and wings light drab. Forewing with areole simple; narrow, well-defined subbasal, antemedian and postmedian lines and a broad, diffused, irregular white subterminal fascia; a broad yellow-ochre fascia proximal to the antemedian, one distal to the postmedian, and a broad fuscous median fascia, giving the whole wing a dark olive tone. Hindwing with discocellulars biangulate; densely irrorated with fuscous-black, the 3 principal lines indicated; subterminal band whitish and a whitish line beyond the median. Durban (the type), Woodbush, etc. Unknown to me. Janse's key calls attention to the position of the angle of the postmedian line — midway between 3rd radial and 1st median (in *spatiosata* before 3rd radial).

P. myopteryx *sp. n.* (10 i). ♂, 20 mm. Antennal joints scarcely projecting, ciliation as long as diameter *myopteryx.*
of shaft. Hindtibia with spurs very unequal, the outer of each pair quite short. Areole simple; 1st median arising close to end of cell. Hindwing relatively small; 1st median just stalked. Differs from *ansorgei* (10 h) in the more nearly unmarked hindwing, its specialised shape and venation, etc. Macenta, French Guinea. 2000 feet, *allilis.*
May 1926 (C. L. Collenette). — **altilis** *subsp. nov.* is rather larger (22 mm) and decidedly broader-winged. Bitje, Ja River, Cameroons (G. L. Bates), a pair in the British Museum.

P. cidariata *Guen.* (10 i). Almost as variable as *Dysstroma citrata* and *truncata* of the Palaearctic *cidariata.*
Region, the band of the forewing (much as in the latter) either black-grey, paler grey, whitish-centred or rufescent; unmistakable through the deep inward bend (between two prongs) of the postmedian line. Structurally characterized by the pectinate ♂ antenna, with 2 pairs of slender pectinations to each joint. Areole in this and almost all the succeeding *Piercia* species simple. Cape Colony, common; also known from Orange River Colony, Basutoland and Natal.

P. leptoyphes *sp. n.* Very near *cidariata*, considerably larger (28 mm), cell of forewing not quite so *leptoyphes.*
long. Coloration pale or light olive, the forewing with grey-brown (approaching hair-brown) irroration and markings; more uniform in aspect than that of *cidariata* (areas less sharply bounded), the projections of the

postmedian — or at least its central one — less strong. Structure closely as in *cidariata*. Machacha, Basutoland, 10 000 feet (R. Crawshay), a ♂ in the British Museum.

dibola. **P. dibola** *sp. n.* (11 a). In the genitalia similar to the preceding, in size and shape similar to *dryas* (10 i), hindwing a little more elongate. Palpus over 1½. Antenna of ♂ somewhat lamellate, ciliation minute. Forewing with 2 areoles, both ample; whitish grey, inclining (especially in distal area) to smoke-grey; white vein-spots at boundaries of basal and median bands; elsewhere with minute dark irroration; markings browner grey, inclining to hair-brown; basal patch chiefly developed as a subbasal band, its outer edge 2-pronged in cell, its inner line dark and thick; median band much as in *dryas*, not very solid, cell-mark elongate; distal area not sharply marked, the dark presubterminal spots at the radials not, or little, stronger than some others of the series; fringe weakly chequered. Hindwing with discocellulars not biangulate, 2rd radial slightly before middle; more glossy grey, with a suggestion of drab; almost unmarked except at abdominal margin. Both wings beneath glossy grey. with traces of postmedian line and pale distal bordering thereof. Cape Colony: Matjesfontein, Worcester district (Trimen), a pair in the British Museum.

bryophilaria. **P. bryophilaria** *Warr.* (10 i) is another pectinated *Piercia*, the postmedian line shaped much as in *cidariata*, the coloration much brighter, the forewing with darkened costal spots; hindwing whitish. The type has the median area fuscous, except in cell and a short tract beyond; an aberration has the entire median area light reddish; in another the median area remains green while proximal and distal have some reddish shading; but the simple green form, here figured, is probably the most frequent. Kikuyu Escarpment (loc. typ.) and distributed as far as Cape Colony.

dryas. **P. dryas** *Prout* (10 i). A rather large species, the median band with central projection less pronounced than in *bryophilaria*, the hindwing and underside dark, the latter sometimes with the white postmedian band clearer. Antennal ciliation short, hindwing discocellulars not biangulate, 2nd radial before middle (group of *lightfooti*). Transkei (type), Natal, Zululand and Transvaal.

lightfooti. **P. lightfooti** *Prout* (10 i) differs from *emmeles* (10 k) in having the face and palpus more black-mixed, abdomen more variegated, wings darker, forewing termen less oblique, cell-mark broader, subterminal finer and more dentate. hindwing with postmedian straighter, its accompanying white band more sharply defined distally. Both wings beneath with the white subterminal line obsolete. Cape Town. Janse considers it may perhaps be a race of *emmeles*. — f. **ceres** *nov.* differs in its clear green forewing (about "mytho green" of Ridgway) more darkened hindwing and underside (especially as regards the distal area), the purer but slenderer white lines of the forewing, a triangular black costal dot developed between basal and median bands, median band proximally with stronger indentation at the fold, distally with a longer projection outward in cellule 6, line of hindwing beneath slender, sometimes obsolete. Face green, generally pretty clean excepting its dark lateral edges; palpus heavily darkened above and on upper part of outerside. Ceres, Cape Colony, March and April 1925 (R. E. Turner) 6 ♂♂ and 5 ♀♀, expanding 18—22 mm; in the British Museum. — Janse mentions a greenish-tinged aberration of *l. lightfooti* from Stellenbosch, which may be somewhat intermediate.

ceres.

emmeles. **P. emmeles** *Prout* (10 k). Strongly glossy, as are also *lightfooti* and *perizomoides*, and with similarly minute antennal ciliation. Larger and greyer than *perizomoides*, hindwing less devoid of markings; underside strongly glossy brown-grey, the forewing with a vague dark line indicating the distal edge of the median band and a vague whitish band beyond, the hindwing with corresponding (but more proximally placed and much sharper) markings, both wings also with slender whitish line near termen. Estcourt, Natal.

perizomoides. **P. perizomoides** *Prout* (10 k). Smaller than the two preceding, colouring more variegated, golden-brown markings being visible on the face and thorax, as well as on the forewing, median band narrow throughout, hindwing whitish, above almost unmarked, beneath with shadowy cell-dot and a weak grey bar just beyond. Waterval Onder, Transvaal.

smaragdinata. **P. smaragdinata** *Walk.* (10 k). A small species with rather long palpus, the ♂ antenna with strong, cilia-bearing teeth, almost appearing pectinated. Ground-colour, when fresh, of a beautiful bright green, the markings strong, the zigzag, pure white lines particularly characteristic. Cape Colony.

nimipunctata. **P. nimipunctata** (*Prout* M. S.) *Janse* (11 a). 17—19 mm. Head green. Palpus about 2. Antenna of ♂ rather deeply lamellate, ciliation almost 1. Body above mostly green, thoracic tuft fuscous. Forewing with areole simple; green, with an unusually large cell-spot, which at once distinguishes the species; 4 elongate costal marks are also characteristic, smaller posterior markings and some transverse irroration further indicating the pattern; terminal cloudings moderate. Hindwing light drab, with little green scaling; faint indications of cell-dot and curved postmedian line. Underside more or less drab, the hindwing more mixed with whitish; markings not sharp, consisting of cell-spot, curved postmedian line and faint subterminal shade. Natal: Impetyeni Forest.

subtrunca. **P. subtrunca** *Prout.* 19 mm. Antennal joints slightly projecting, ciliation fully as long as diameter of shaft. Forewing slightly narrower than in *bryophilaria*, termen more oblique posteriorly; slightly bluish green,

a little mixed with white; markings russet to cinnamon-brown; basal patch 1.5 mm, mixed with green; median band 3 mm wide at costa, 1.5 mm at hindmargin, proximal edge slightly curved and crenulate, distal slightly indented near costa, more incurved at 2nd radial, extremely oblique inward from behind 3rd radial to 2nd median near its base; distal cloudings indefinite, except the anterior subterminal ones. Hindwing rather narrow, subconcave near anal angle (as in the following species), abdominal margin in posterior half clothed with dense, coarse, buff-tinted hair; ground-colour rather light drab. Underside somewhat drab, beyond the middle whiter, distally darkened, though less strongly than in *subterlimbata*. Kikuyu Country: Wambogo. 1700 m, only the type ♂ known.

P. subconcava *sp. n.* (11 a). Evidently near *subtrunca*, which I cannot now compare. Antenna with *subconcava.* the ciliation longer, apparently almost twice diameter of shaft, arranged in slender, compact fascicles, 2 pairs to each joint, arising from small processes (rudimentary pectinations). Forewing with band still more narrowed posteriorly, at hindmargin bounded with white. Hindwing whitish, with a tinge of buff, the hair at concavity and abdominal margin less manifest; cell-dot fairly sharp, though minute, postmedian line faint. Underside with no trace of dark borders. W. Kivu: Kisiba, Bugoie Forest, 8500 feet, November 1921, the type ♂; ? Ruanda dist., Kabira Forest, N. of Lake Tanganyika, 7000 feet, January 1924; both collected by the late T. A. Barns.

P. hargreavesi *sp. n.* (11 a). Face scarcely tufted. Palpus 1¾. Antennal joints slightly projecting, *hargreavesi.* ciliation somewhat over 1. Head fuscous. Thorax with some green above (Abdomen lost). Forewing with areole double, the distal one ample; coloration and general effect of a dark *prasinaria* or *subrufaria*; distinctive are the elongate cell-mark and the shape of the median area, with its strongly narrowed posterior half and especially the deep encroachment of the green ground-colour proximally in the cell; white distal edging of the postmedian rather distinct. Hindwing with 2nd discocellular somewhat curved, 2nd radial central, arising very little behind cell-fold; appears long and distally narrow, the termen being concave behind 1st median, the posterior part of the wing somewhat folded and contorted, at end of abdominal margin developed into a sort of flap, beneath densely clothed with coarse specialized scaling, a number of very broad scales showing a metallic shimmer. Both wings beneath weakly marked. Uganda: Fort Portal, September 1933 (H. Hargreaves) the unique type a ♂ in the British Museum, presented by its discoverer.

21. Genus: **Horisme** *Hbn.*

Near *Eupithecia*, most of the generally employed taxonomic characters identical in the two genera: palpus moderate, antenna simple, hindleg in both sexes normal, abdomen with small crests, wings without special modifications, discocellulars of hindwing not biangulate. The species are generally larger, in shape perhaps nearer to *Piercia* than to *Eupithecia*, the hindwing often crenulate, generally concolorous with the forewing and equally strongly marked. As a rule the thorax shows a better developed (double) posterior crest than *Eupithecia*; areole of forewing double, as in relatively few *Eupithecia*. The genitalia likewise have much in common with that genus — formation of labides, coremata on 9th segment, etc. — but there is no "body-plate". The larvae, at least as regards the Palaearctic species, have not the flower-feeding habit which is so usual in *Eupithecia*. Widely distributed in the Old World and very sparingly represented in North America. The half-dozen or so of African species belong almost entirely to the east or south.

H. ustiplaga *Warr.* (10 k). A small species, rather anomalous in the strongly lamellate ♂ antenna. *ustiplaga.* and metallic thoracic crest. Palpus less strong than in most of the species, wings little elongate. Variable, but not like any other; the blend of colours and the heavy black scaling about the end of the cell of the forewing are sufficiently characteristic. Natal (loc. typ.), the Transvaal and Cape Colony.

H. pallidimacula *Prout* (10 k) is likewise rather small, but is nearer to *obscurata* in shape and colouring. *pallidimacula.* Readily known by its stronger crests, the pale mid-subterminal spots or dots and the sharply marked underside, which somewhat approaches that of *natalata Walk.*, though less strongly darkened distally. Transvaal and extending to Nyasaland and Uganda.

H. filia *Prout* (11 a). As small as *ustiplaga*, which may possibly be its nearest relative. I have unfor- *filia.* tunately no note regarding the ♂ antennal structure. Hindwing with margin more crenulate, coloration less varied, cell-dot of forewing indistinct, postmedian line of hindwing more regular. Natal.

H. obscurata *Prout* (10 k). A rather common species, with somewhat the facies of the *tersata* group *obscurata.* of the Palaearctic Region. The variation is in large measure sexual, the ♂♂ usually having the median area little darker than the rest, while in the ♀♀ it is commonly more or less strongly bandlike. Described from the Transvaal but extending to Kivu and Kenya and to Cape Town.

H. punctiscripta *Prout* (11 a). Described as an *Ortholitha* but more probably a rather long-winged *punctiscripta.* *Horisme*, though the crests, in the sole specimen before me, are not very manifest. Otherwise pretty similar

to a much paler *obscurata* with the postmedian line more projecting in the middle. Antenna of ♂ lamellate. Cape Town.

minuata. **H. minuata** *Walk.* (= brunniceps *Feld.*) (10 k). Still longer-winged, more glossy, the markings of the forewing extremely oblique. Sexual dimorphism strong, the ♀ with conspicuous pale anterior streak as in *vitalbata* of Europe. Distributed from the Cape to Angola, Uganda and Kenya Colony.

albostriata. **H. albostriata** *Pagenst.* (11 a) seems to be closely related to *minuata*, possibly a race. Sexual dimorphism similar. Larger, much less brown, the principal lines strong, the subordinate ones relatively slight. Comoro Islands.

suffusa. **H. suffusa** *Hmps.* This South Indian form, which represents the very widely distributed Indo-Australian group typified by *bcarmiata* Snell., has been recorded by Janse from Impetyeni Forest and Karkloof ("Nigeria" is a misprint for Nilgiris, the type locality). It will be dealt with in Vol. 12, but as it seems to be established in Natal (however introduced) it must be mentioned here. Very variable individually and (especially) sexually; the ♀ nearly always very easy to recognize by some white blotches; the ♂ with less white, though some is nearly always discernible outside the postmedian of the hindwing, which is more acutely angled than in *obscurata*. Underside with the cell-dots large. Hindwing with the distal margin strongly crenulate.

22. Genus: **Eupithecia** *Curt.*

A nearly cosmopolitan genus of small moths which are generally well characterized by their shape and by their genitalia (see Vol. 4, p. 274), although some of the other morphological characters are somewhat inconstant. Palpus moderate or elongate. Antenna of ♂ generally ciliate or almost simple. Abdomen with a series of small crests. Forewing with distal margin relatively long, strongly oblique, areole double or simple. Hindwing relatively small, discocellulars rarely biangulate, 2nd radial about central. The African species are still very imperfectly known, their biology hitherto almost entirely unknown; with the exception, perhaps, of the more glossy-winged *dilucida*-group, they seem quite nearly related to those of the Palaearctic Region.

A. Section *Eucymatoge Hbn.* Areole double.

pretoriana. **E. pretoriana** *Prout* (11 a). Forewing with costal and distal margins less elongate than in most of the species. The one which most resembles it, both in shape and markings, is *connexa Warr.*, which has the areole undivided and is not known from the South African subregion. Pretoria.

subcanipars. **E. subcanipars** *Prout* (11 g). Our figure gives a good idea of the shape of the species, but is not sufficiently variegated; the colours are nearly those of variegated *pimpinellata Hbn.* (Vol. 4, pl. 12 d) but their arrangement is very different, the greyish scaling being placed chiefly in and beyond the cell of the forewing. Transvaal: Pilgrim's Rest. By a misprint, the type was published as "♂".

coaequalis. **E. coaequalis** *Janse* (11 b). Closely like *subcanipars*, the areole similarly double. Abdomen with much darker clouding dorsally. Forewing less rufescent, the markings stronger and more uniform in expression, showing some tendency to strengthen at costa, the hoary patch wanting. Hindwing rather whiter, at least anteriorly. Underside perhaps somewhat more sharply marked. Until the ♂ structures have been compared, I cannot feel sure that it is not a subspecies. Palpus longish-moderate. ♂ antennal ciliation very short. S. Rhodesia: Bulawayo and Umvuma.

thessa. **E. thessa** *sp. n.* (11 b). 19—20 mm. Face with slight cone below. Palpus nearly 1¾ times diameter of eye, heavily scaled, mostly fuscous-mixed, the base pale. Antenna of ♂ with the ciliation less than ½ diameter of shaft. Abdomen above with 1st segment pale, the rest much mixed with red-brown and fuscous. Forewing with areole generally divided, but variable (the proximal areole in 1 ♀ quite small; in the type ♂ still smaller on the left wing, on the right apparently wanting; in the other ♀♀ of normal size); pale drab-grey, more or less suffused with drab; cell-dot minute; lines mostly weak, formed of interrupted dark irroration, those in the centre of the wing excurved between the median vein and the submedian; postmedian line fairly well developed from 1st radial to 2nd median; terminal area darker than the ground-colour; subterminal line forming an irregular W in front of the 1st radial. Hindwing with termen not quite regularly rounded, being very slightly prominent at the 1st and 3rd radials, 1st median and 2nd submedian and a little straighter in the radial and submedian areas; markings mainly rather weak. Underside glossy, hindwing paler than forewing; cell-dots better developed; costal spots or dashes at the beginnings of the lines; lines generally continuous, the postmedian and the divided pale band outside it best developed. S. Africa: Kastrol Nek, January (G. van Dam). 1 ♂, 3 ♀♀; type in Transvaal Museum. The shape, minute cell-dots, etc., readily separate this species from *pretoriana*.

E. rigida Swinh. is a very widely distributed Indo-Australian *Eupithecia* and will be dealt with in *sporadica.* Vol. 12. — **sporadica** *Prout* (11 b) has the postmedian line of the forewing somewhat less sharply bent, the white costal mark outside it single (in *r. rigida* nearly always double), hindwing with the double pale mark on the

abdominal margin very strong. Occasional in Uganda, East Africa and Rhodesia, perhaps less rare in Madagascar.

B. Section *Eupithecia*. Areole simple.

E. festiva *Prout* (11 b). A pretty little species, not liable to be confused with any other known African *Eupithecia*, but evidently close to *compsodes Meyr.* and *melanolopha Swinh.* of the Indo-Australian Region, perhaps conspecific; less heavily marked. Face with a long pointed tuft. Palpus rather strong, with a tuft at base. Antennal ciliation in the ♂ minute. Abdomen of the ♂ pointed. Prevailing tone brown, a pinkish-buff hue deepening to cinnamon-buff or cinnamon, some cloudings and most of the median area of the forewing fuscescent. Characteristic are the pure white postmedian and subterminal lines, the former not lobed nor angled. Scattered from Barberton (loc. typ.) to Belvedere, Cape Province. *festiva.*

E. oblongipennis *Warr.* (11 b) was described as a *Chloroclystis*, probably on account of a greenish tinge in the ground-colour. Face and palpus pale, the latter rather long, but not robust. Hindwing above and beneath strongly marked. The type ♂ has the forewings torn and both the known ♀♀ (one of which we figure) are rubbed, but recognizable. Kikuyu Escarpment. *oblongipennis.*

E. thomasina *Prout.* Larger and slightly longer-winged than *longipennis*, without greenish tinge, hindwing almost unmarked, forewing with the postmedian line more regularly excurved in anterior part, an ill-defined dark band developed between basal patch and median band. São Thomé, variable, the median band in part white-mixed. — **dohertyi** *subsp. nov.* (11 b). Larger still, more uniform-looking, with less blackening of the antemedian lines of the forewing, the proximal postmedian line also less heavy, the lines outside it better expressed; forewing beneath rather brighter brown. Kikuyu Escarpment, 6500—9000 feet (Doherty). *thomasina.* *dohertyi.*

E. tricuspis *Prout.* Expanse 33 mm. Very much like an overgrown *dilucida* (11 b), except for the form of the antemedian line, which is acutely angled outward in the cell and has a second, longer but slightly less acute, prong outward between the median and the submedian veins; postmedian line even more acutely angled outward than in *dilucida*, the white subterminal better developed. Kilimandjaro, between 2800 and 3000 m elevation, only the type ♀ known. Possibly a form of *immodica*, underside scarcely distinguishable. *tricuspis.*

E. dilucida *Warr.* Variable. Abdomen, at least in the ♂, elongate, often, but not always, with a white belt at base. Wings elongate, glossy, the median area commonly white, sometimes yellowish, never as dark as the antemedian band, though sometimes — especially in a race (?) from Madagascar — traversed by dark lines; postmedian bandlike anteriorly, with a rather acute angle outward, posteriorly weak, interrupted or almost obsolete; a more or less extended blackish costal cloud beyond it. In the name-type, described from Nandi, the blackish antemedian band is not extended baseward. — ab. **nigribasis** *Warr.* (11 b) has the entire proximal area of the forewing blackish. — ab. **carnea** *Warr.* has the normally white areas of the forewing changed to pinkish buff. — *dilucida* is distributed in East Africa (commonest in Kenya) and reappears on Madagascar. *dilucida.* *nigribasis.* *carnea.*

E. immodica *Prout* (11 c) differs from *dilucida* in its large size (31—35 mm) and the obtuse angle of the postmedian line. Otherwise it seems to be equally variable. Hindwing proximally generally more or less whitened. Fringes perhaps less strongly mottled than in *dilucida*. Birunga: Mikeno, at 3100 m. *immodica.*

E. semiflavata *Warr.* (11 c) differs from *dilucida* in the buff hindwing. Antennal ciliation slightly less rudimentary. Breast and forecoxa with a pale patch. Forewing coloured nearly as in *dilucida* ab. *carnea*, but without black basal patch or antemedian band, both the proximal and the median area more regularly traversed by wavy lines. Kenya, 6000—10 000 feet. *semiflavata.*

E. mecodaedala *Prout* (11 c). Confusingly similar to *dilucida* and *semiflavata*. Breast without the pale patch of the latter, antenna almost as in that. Abdomen with white belt. Forewing with the proximal darkened area very ample, brown rather than black and not quite solid; postmedian line crossed between the 2nd and the 3rd radial by a very characteristic fuscous or reddish streak. Hindwing with a buff tinge, but paler than in *semiflavata*; discocellulars noticeably biangulate. Mount Kenya and Aberdare Range, chiefly at high altitudes. *mecodaedala.*

E. ecplyta *Prout* (11 c) suggests an extremely washed-out form of *mecodaedala* with less markings, the postmedian less angled. Forewing with apex acute. Hindwing with discocellulars not appreciably biangulate; yellow-whitish, almost or quite unmarked. Aberdare Range: alpine meadows of Mount Kinangop, at above 3000 m, while *mecodaedala* occurs on the same mountain in bamboo forests, up to 3000 m. *ecplyta.*

E. tetraglena *Prout.* Coloration much as in *semiflavata* (11 c). Abdomen with a pale belt, but this is pinkish buff rather than whitish; forewing with apex not quite so acute, glossy brown, with costa and some of the veins spotted, numerous extremely ill-defined rippled transverse lines, subterminal expressed by 4 rather conspicuous white, longitudinally oval interneural spots between the 5th subcostal and 1st median; hindwing pinkish buff, shading into cinnamon-buff distally. Mount Kinangop, with *ecplyta*. *tetraglena.*

isotenes. **E. isotenes** *Prout.* At first sight suggestive of a rather narrow-winged, less black-marked *dilucida* (11 b, *nigribasis*), with the median area a little narrowed, especially about the 1st radial, where the outward angulation of the postmedian band is more obtuse. Probably really nearer to *semiflavata*, the palpus being a trifle less elongate than in *dilucida*, the breast with a pale patch in front. Forewing with postmedian band complete, but generally quite narrow posteriorly. Hindwing with discocellulars slightly biangulate, as their central section is the most oblique; paler grey than in *dilucida*, scarcely tinged with yellow (not even so strongly as in *mecodaedala*); no distinct markings. Mount Kinangop, with the two preceding.

hemiochra. **E. hemiochra** *Prout* is a little smaller (21 mm), the ♂ antenna serrate-dentate, with ciliation almost as long as diameter of shaft. Wings a little narrower than in *semiflavata* (11 c), the forewing with costal and distal margins nearly straight, the latter very oblique, its colour pinkish-buff, the median area rather narrow (at least in the ♂) and defined by narrow, conspicuous ante-and postmedian stripes, the latter rather sharply angled behind the 1st radial, the fringe weakly spotted. Hindwing cream-buff, slightly paler proximally than distally; some dark dots at abdominal margin; terminal line interrupted. Mount Kenya, at 4000 m.

meditunata. **E. medilunata** *Prout* (11 c). Expanse 20—23 mm. Antenna of ♂ with long teeth (rudimentary pectinations), surmounted by cilia of nearly their own length. Forewing glossy brown, generally with a tinge of reddish and with dark suffusions, characterized by its oblique proximal markings, the antemedian represented by lunulate white marks at the base of the 2nd median branch, the fringe with 2 whitish lines. The elongate, weakly-marked hindwing is also distinctive. Mount Kinangop, Aberdare Range, 2400—3100 m.

albistillata. **E. albistillata** *Prout.* Only known from a single ♀, taken with the preceding at above 3000 m. Expanse 24 mm. Palpus about twice as long as diameter of eye, heavily scaled. Antenna with the ciliation unusually long for a ♀ (about ½ diameter of shaft). Breast with a pale patch in front, as in *semiflavata* (11 c). Forewing fairly broad, the darker bands of the allied species here scarcely indicated, the pale centre of the median area shown by paired spots or streaks at costa, at median vein and at submedian, the proximal of each pair the whiter and better developed; a further pair at costa beyond middle; subterminal white line rather broad, interrupted at costa and between the medians, extended in cellules 7 and 3 into longitudinal spots which extend on to the base of the fringe. Hindwing glossy drab-grey, almost unicolorous.

orbaria. **E. orbaria** *Swinh.*, founded on a ♀ from Eb Urru, Kenya Colony is closely similar to *dilucida* (11 b) from adjacent localities, but is somewhat shorter winged, less bright-looking, with the basal patch of the forewing rather less excurved at the fold, postmedian less acutely bent outward anteriorly. Abdomen without white belt. Hindwing with 2nd radial about central, almost continuing the cell-fold; not whitish, though not very dark, distal border darker, especially its proximal half.

picturata. **E. picturata** *Warr.* (11 c), founded on 2 ♀♀ from the Kikuyu Escarpment, is easily distinguished by the grey-tinged median band and the bright reddish-brown subbasal and terminal bands, the latter broad, with fine white subterminal line in posterior half, whitish midterminal suffusion and indications of an oblique white dash near apex. Terminal line black, interrupted by white vein-dots; fringe spotted.

dissobapta. **E. dissobapta** *Prout* (11 c). Smaller and narrower-winged, with heavy black markings edging the median area of the forewing, darkened hindwing, etc. Station Perinet, 149 km. E. of Tananarivo, founded on 7 ♀♀ collected in October and November 1930.

amphiplex. **E. amphiplex** *Prout* (11 d). Palpus shortish-moderate. Ciliation of ♂ short (about ½ diameter of shaft). Differs from all other African *Eupithecia* yet known in the characteristic dark costal maculation of the whitish forewing and the soft brown band proximal to the subterminal line. Only known from Kenya Colony.

somereni. **E. somereni** *sp. n.* (11 d). ♂ unknown, but a near relationship to *amphiplex* may be safely assumed. Palpus similar. Colour light pinkish cinnamon, not whitish; an incomplete fawn-coloured band proximal to the subterminal of the forewing, strong only between hindmargin and 2nd median, a little stronger about the radials than about the medians, obsolete anteriorly; the subterminal itself white, strongest in the same positions; besides the strong, elongate black cell-mark, the most conspicuous markings are the costal ones of the forewing alternately punctiform and macular, the rather narrow median area further emphasized by fawn, black-mixed marks at hindmargin. Hindwing in part paler. Nairobi, May-June (Dr. van Someren), 3 ♀♀ in Tring Museum.

nabagulensis. **E. nabagulensis** *sp. n.* (11 d) can hardly be a form of *somereni*, in spite of the strong resemblance. Forewing decidedly shorter and broader, hindwing with termen straighter from 1st radial hindward; costal marks weaker, except the triangular one against the cell-mark, posterior marks of forewing obsolete, both wings with terminal "army-brown" band (shown also beneath), containing the subterminal line. Nabagulo Forest, 15 miles from Kampala, 25 October—6 November 1921 (W. Feather), 1 ♀ in Tring Museum.

hemileucaria. **E. hemileucaria** *Mab.* 17 mm. Forewing from the apex to the base of the inner margin cut by an oblique black line; this line crosses also the hindwing and base of abdomen. The part in front of this line is white, with

a minute cell-dot; the other part fuscous-violaceous, divided by a sinuous whitish line which arises before the cell and runs to the abdominal margin. A similar but obsolescent line before the termen, and a series of black dots; finally a black thread precedes the fringes. Wings beneath whitish. Madagascar, 1 ♀.

E. perigrapta *Janse* (11 d). 19 mm. Whitish, with some sprinkling of ochreous scales, which outside the postmedian line of the forewing becomes dense and mixed with deep pink, broadly between the radials, then as a line to hindmargin; the 3 principal lines of forewing black, very oblique, broad only in anterior half of wing, a black line along costa outside the postmedian; ill-defined black subterminal spots between the radials; terminal line interrupted at the veins. Hindwing with some black median and postmedian irroration and a zigzag pinkish subterminal line. Founded on ♀♀ from Kowie River, Bathurst, Cape Colony. A form (?), with less pink admixture, is known to me from Kastrol Nek, Malta (Transvaal) and I think Estcourt (Natal) and is here figured. When the type was before me, I did not notice that these differed in the course of the lines, but as they are certainly not here „very oblique" there may be two closely similar species confused. *perigrapta.*

E. streptozona *Prout* (11 d). A small and pale species, chiefly remarkable for its exceptional leg structure, which may possibly necessitate its removal from the genus. Hindtibia with only one proximal spur present, the terminal spurs of moderate length. Palpus rather short. Cell-spots large, the very fine and sinuous postmedian line thickened at the costa of the forewing and abdominal region of hindwing. Station Perinet, E. of Tananarivo, only the ♀ known. *streptozona.*

E. connexa *Warr.* (11 d). Forewing relatively short and broad, the distal margin long and curved, but less oblique than in most *Eupithecia*. ♂ antenna with the ciliation very short; palpus moderate, infuscated. The ♂ type, from Fovira, Unyoro, is smaller than the figured ♀ from Kavirondo, somewhat browner-tinged, the two principal lines not better indicated than the numerous others which traverse the wing, all very slender, sinuous, best marked on the veins; with the lens, the double pale band outside the postmedian is seen to be rather characteristic, its proximal half whitish, its distal with a more fleshy-brownish tinge, the fine lines which bound and bisect it somewhat less macular than the rest. Hindwing paler anteriorly. Little known, perhaps confined to the region of the Victoria and Albert Nyanza. *connexa.*

E. brachyptera *Prout* (11 d). Similar in shape to *connexa*, less brownish, cell-mark of forewing more roundish, the two sections of the pale band outside the postmedian concolorous, underside rather more strongly marked, etc. Transvaal, the type from Pretoria; only ♀♀ are yet known. *brachyptera.*

E. undiculata *Prout* (= vermiculata *Warr.*, praeocc.) (11 e). Variable in size, otherwise fairly constant. Forewing less broad than in the two preceding, cell-dots minute or obsolete, lines wavy but not so irregular as in *connexa*, the whitish ones (original ground-colour?) narrower than the more brownish; terminal region of forewing slightly darker or greyer than the rest, with the slender subterminal line fairly will marked, not widening at tornus. Hindwing pale except at distal and abdominal margins. Uganda and Kenya to S. Rhodesia, the type from Toru. *undiculata.*

E. albicristulata *Prout*, named from the rather conspicuous, though very minute, white tips to the abdominal crests, is only known from the original ♂, taken near Nkandhla, Zululand, in January. Palpus moderate. Antennal ciliation only about ½ diameter of shaft. Thorax and abdomen in part reddish brown. Expanse 19 or 20 mm. Wings grey, the forewing with more ferruginous tone along the veins distally, along the subcostal and submedian to the base and about the origin of the 3rd radial and the medians, nowhere sharply defined; lines quite indefinite, especially in proximal part. Hindwing paler, with minute cell-dot and darkened abdominal and distal margins. Underside strongly marked, especially the hindwing, which is whitish, with 4 thick, distinct, complete lines, the second crossing the cell-dot. Thus the upperside somewhat recalls *undiculata*, the underside *hypophasma*. *albicristulata.*

E. adunata *sp. n.* (11 e). Head and front of thorax white, a black spot on each side of face, a slight black band at its upper edge. Palpus heavily scaled, dark-marked on its outerside. Body and wings white, with drab irroration. Distinguishable by its elongate, somewhat glossy wings, the black vein-dashes (or small wedge marks) at the ante- and postmedian lines, and enlarged, inwardly oblique spot at costa, succeeded by an exceptionally oblique outward bend of the postmedian line. Hindwing strongly marked at the abdominal margin only. The white fringes sharply spotted. Forewing beneath mostly suffused, the postmedian and subterminal costal spots strong. Hindwing beneath more uniformly marked than above, 5 or 6 lines (besides the terminal) being recognizable, though not strong. Réunion, 2 and 6 May 1922 (G. F. Leigh), 2 ♀♀ in the Tring Museum. *adunata.*

E. rubristigma *Prout.* Face with tuft at lower edge slight. Palpus 1¾ times diameter of eye, 2nd joint rather heavily scaled. Wing-shape about as in *gradatilinea* (11 e), of which it may perhaps be a form. Forewing whitish, with lighter or darker olivaceous suffusions, the median area rather strongly irrorated with blackish except at costal and hind margins; cell-spot red, large, nearly as broad as long; lines slight, except the 3 principal ones, which are black, more or less dentate, the median touching the proximal side of the cell-spot, the postmedian in places thick, its course about as in *gradatilinea*; subterminal markings not strong, some slight *rubristigma.*

red marking at the 2nd radial. Hindwing whiter, exeept at distal and abdominal margins. Underside pale, the prineipal markings strongly expressed. Mt. Kenya, in open meadows at about 2000 m, the type ♀. A few similar ♀♀ from scattered loealities in Kenya Colony and even in Abyssinia show considerable variation inter se, but all have the cell-spot of the forewing blaek and are perhaps better regarded provisionally as *gradatilinea*.

gradatilinea. **E. gradatilinea** *Prout* (11 e). Antennal ciliation of the ♂ minute. Forewing whitish grey with a tinge of buff and with dark grey irroration; eell-mark black, elongate; markings somewhat variable, rarely sharp, excepting the postmedian, which is thick in its anterior part, then running inwards in somewhat the shape of a staircase; median line generally erossing the cell-spot. Hindwing in part whiter, somewhat irideseent in the cell, only the abdominal and perhaps the terminal region sharing the eolour of the forewing. Underside also whitish and somewhat iridescent, the eell-spots and postmedian line sharply marked. — ab. **rubidimixta** *Prout* is a reeurrent darker form, with generally enlarged eell-spots and with some reddish admixture on the forewing, notably between the radials distally to the median area; one or two white subterminal spots often developed. Founded on ♀♀ and aecording to Janse still known only in that sex. The speeies is not rare in the Transvaal and reaches Cape Colony and perhaps (see remark under *rubristigma*) Kenya and Abyssinia.

rubidimixta.

rubiginifera. **E. rubiginifera** *Prout* (11 e). Faee with tuft. Palpus rostriform, with spreading seales. Abdomen whitish at base, then blaek, the posterior segments sprinkled with white. Forewing dirty white, the markings not sharp, in part macular, fairly well developed as costal spots; postmedian distinct, blaek, interrupted by a rusty cloud between the radials; the white subterminal also well developed. Hindwing above very weakly marked. Both wings beneath with eell-spot, that of the hindwing elongate but weak; forewing further marked costally by alternate black and white spots and distally by a suffusion as far as the 1st median, rendering visible the dentate pale subterminal; hindwing with weak antemedian and median lines and weak curved band parallel to termen, aeeompanied proximally by dark vein-dashes. Haenertsburg, Transvaal, only the type ♀ yet known.

subscriptaria. **E. subscriptaria** *Prout* (11 e). Palpus moderate (at least 1½). Antennal ciliation of ♂ minute. Forewing of medium breadth, dirty white with eopious greyish drab irroration, somewhat darker costal maculation and blaekish cell-spots, altogether more reminiscent of a brown-tinged *semigraphata Brd.* (Vol. 4, p. 289) than of *scriptaria Frr.*, with which I originally compared it. Pale markings formed by absence of irroration, the very oblique antemedian band fairly clear; in this and in its smaller size distinguishable from *polylibades*. Underside fairly well marked. Transvaal, the type from White River.

polylibades. **E. polylibades** *Prout* (11 e). Frontal tuft slight. Palpus moderately long, 2nd joint heavily scaled above. Ciliation of ♂ antenna very short. Forewing whitish grey, with very numerous, almost evenly developed, wavy, somewhat punctiform, darker grey lines (shown too dark in our figure) and a large oval cell-spot. Hindwing with the markings continued, except costally. Underside rather lighter and more glossy, forewing suffused proximally, the eell-mark and angulated (not punetiform) lines beyond it present, the hindwing not suffused, the first angulated line proximal to the cell-spot, the second crossing it, the third subterminal. Transvaal and Basutoland, the type from Pretoria.

sagittata. **E. sagittata** *Warr.* (11 e). A more striking species, more drab in tone, without irroration, the markings of the forewing few but sharp: some eostal spots; a long, slightly bent eell-mark; very fine, more or less eurved lines; often a browner spot or suffusion behind the 2nd median elose to the termen. Hindwing with very eharacteristie, deeply dentate lines near termen. Natal to South Rhodesia, the type from Weenen.

resarta. **E. resarta** *Prout* (11 f). Antennal ciliation of ♂ less than half diameter of shaft, probably not longer than in *rediviva*, of which, indeed, *resarta* may well be the East Afriean representative. Ground-eolour about the same, but the general impression very different, the lines being mueh stronger and more brightly coloured, in part broadened. Hindwing a little whiter than forewing but, in fresh specimens, not so weakly marked as in most *rediviva*. Kenya Colony, espeeially about Nairobi.

rediviva. **E. rediviva** *Prout* (11 f). Antennal eiliation of ♂ minute. Frontal tuft pointed. Palpus moderate, heavily scaled. Forewing with the lines (numbering about 9) ill-defined, specially the proximal ones, in general parallel with termen, but more or less bent or angled near costa (perhaps less strongly than in *resarta*); eell-dot small but sharp. Hindwing palcr, generally very weakly marked. Underside of each wing with distinet eell-dot and two rather thick and diffuse but weak outer lines, hindwing in part dark-speekled. Transvaal and I think Natal.

pettyi. **E. pettyi** *nom. nov.* (= parallelaria *Janse*, nee *Bohatsch*). 18—19 mm. Near *resarta* and *rediviva* in shape and design, but much more sharply marked, both above and beneath, the eell-spot on the forewing above and on both wings beneath rather strong. Palpus fuseous, fringed with white seales below. Antenna of ♂ finely ciliated. The pale body heavily irrorated with ochreous and fuscous. Forewing with the prineipal lines edged on both sides with lines of slightly raised pale seales, which are followed (antemedian) or preceded (postmedian) by narrow black scaling; similar black scaling behind lower radial and 2nd median. Hindwing pale in eostal half, the rest more nearly as on forewing. Elsenburg, Cape Colony, a series bred by Dr. Petty, the foodplant not recorded.

E. atomaria *Warr.* Greyer than the three preceding. Palpus longer, decidedly darker. Abdomen darker dorsally, without the definitely white ridge and crests which they exhibit. Otherwise very similar, but the lines of the forewing are more equally developed throughout than in *resarta*, the postmedian much less manifest above, very slender beneath, the abdominal region of the hindwing more strongly darkened. Kikuyu Escarpment. *atomaria.*

E. hypophasma *Prout.* (11 f). More ochraceous-brown than any of the previous South African *Eupithecia* and typically with quite exceptionally strongly marked underside, but unfortunately this latter character has proned to be less constant than was anticipated. Palpus moderate, heavily scaled. Ciliation of ♂ antenna minute. Cell-spots small; lines of forewing very oblique; hindwing commonly with the terminal area clouded with the brown of the forewing. Underside in the distal part with the whitish ground-colour marked with broad brown bands; even when these are weak the distinctiveness is not entirely lost. Distributed from the Transvaal to Cape Colony, the type locality Haenertsburg. Perhaps also at Suna, S. Kavirondo. *hypophasma.*

E. laticallis *Prout* (11 f). Palpus scarcely 1½ times diameter of eye. Antennal ciliation of ♂ less than ½ diameter of shaft. Abdomen dorsally much chequered, light brown (at base whitish), the first crest rather bright brown, the rest black-tipped and succeeded by white spots; a subdorsal pattern of blackish spots. The elongate forewing shows some slight hoary scaling in places; lines partly duplicated, the proximal ones strongly dentate, the postmedians sharply defined, bent or slightly angled outward behind the fold. Hindwing paler, except at abdominal and distal margins, the cell-dot minute. Forewing beneath more smoky, hindwing dirty whitish, with rather large black cell-dot and fairly distinct lines. Cape Town, March and May. *laticallis.*

E. devestita *Warr.* is only known from the rather rubbed type ♂, and cannot be adequately described or figured until further material is to hand. Face almost without tuft (?). Palpus short. Antennal ciliation minute. Smaller and shorter-winged than *atomaria*, to which it approximates in colour, the costa and apex of the forewing slightly rounder. Probably characteristic are the strong dark costal spot distally to the double pale line which (as usual) succeeds the postmedian, and the postmedian dark mark at the radials; both these marks are found again in the otherwise totally dissimilar *inconclusaria* (11 h). The underside appears to be weakly marked. Kampala, Uganda. Seems to resemble *thessa* (11 b); wings narrower, areole simple. *devestita.*

E. celatisigna *Warr.* (11 f) is the first of a series of very obscure long-winged forms which have hitherto received very little attention and may embrace some synonyms; their further elucidation must depend on biological and anatomical work. The type of the present species, which provides the oldest name in the group, is a ♀ in wasted condition (Kikuyu Escarpment, 6500—9000 feet, January 1901), but fortunately a few other exemples were also collected at the same time and place and seem certainly to belong with it; we figure one of them, a large ♀. The ♂ is a little less dark, especially on the hindwing, which, however, conserves the darkened borders and thick black terminal line which seem characteristic of the species. Antennal ciliation minute: palpus reaching little beyond face-cone; cell-dots minute; markings of forewing extremely weak, excepting a small blackish subterminal mark behind the 2nd median, the position of the angulated postmedian line shown by the *broad* double (very slightly paler) band which borders it externally; hindwing with distal margin quite straight from the rounded apical region to a curve which commences behind the 3rd radial; underside a little less indistinctly marked, especially as regards the hindwing, which shows a distinct, slightly curved postmedian line little beyond the cell-dot and a broad pale band between this and the suffused terminal area. Known also from Nairobi; other records doubtful. *celatisigna.*

E. perculsaria *Swinh.*, which was formerly sunk to *celatisigna* (11 f), is closely similar, but has the ♂ ciliation about as long as diameter of antenna, the hindwing somewhat darker, the underside more weakly marked. Kenya Colony: Masai (the type) and Fort Smith, Kikuyu, Mt. Kenya (2400 m), etc. Perhaps also in the Transvaal and Orange Free State. *perculsaria.*

E. lugubriaria *Swinh.*, founded on 2 ♀♀ from Roromo, Kikuyu, is again very similar, but somewhat darker, glossy, the dark markings extremely weak, the postmedian best expressed, apparently formed as in the two preceding. Some white scaling about the minute black cell-dot of the forewing and small white, proximally black-tipped subterminal dots, ending with a less small white one at fold, seem to be the most distinctive features. *lugubriaria.*

E. amathes *Prout*, from Karissimbi, Birunga, which I described as being "probably nearest to *lugubriaria* but without the whitish submarginal spots", is only known from the ♂ type. 26 mm. Face-cone slight. Palpus 1¾, 2nd joint heavily scaled. Antennal ciliation ½ diameter of shaft. Forewing almost as long and narrow as in *mendosaria* (11 f), from which it differs in the strong blackish irroration (whereby the wood-brown ground-colour is made to appear more olivaceous) and in the white mark which borders the slightly elongate cell-mark distally. The pale hindwing heavily darkened at abdominal margin, asin *mendosaria.* *amathes.*

E. mendosaria *Swinh.* (11 f). Recognizable by its extremely elongate forewing, which is less darkened than in either of the 4 preceding species and more inclines to fawn-colour. In structure similar to *amathes*, *mendosaria.*

perhaps with neither the palpus nor the antennal ciliation quite as long. Markings weak, both above and beneath. Kenya Colony: Machakos (loc. typ.) and Molo, Mau Escarpment, at 2420 m.

profuga. **E. profuga** *Prout.* Smaller (19 or 20 mm). Palpus about 1½. Forewing narrow, with apex somewhat more acute than in *mendosaria* (11 f), its coloration dull greyish drab (produced by copious dark irroration on a pale ground, much as in the European *E. castigata*, etc.); cell-dot obsolete; lines scarcely formed, though the antemedian and postmedian are indicated, probably each consisting of 2 lines, the antemedian forming a gently curved band (about 5 mm wide) the 2 postmedian rather connected by longitudinal dashes; traces of a very fine pale subterminal; the blackish terminal line interrupted at the veins; fringe with pale basal and central lines, a slight darkening between then. Hindwing rather narrow, costa rather long, distal margin somewhat sinuous; central parts somewhat paler than forewing. British Somaliland: Shimba Beris, Surud Range, 7000 feet, 1 ♀.

regulosa. **E. regulosa** *Warr.* (11 f) recally in its shape and tone a half-sized *mendosaria*, but neither wing is quite do extremely elongate in proportion. Antennal ciliation short. Cell-dots and on the forewing the lines better developed than in *mendosaria*, the regular alternation of almost straight lines, darker and paler, parallel with the termen, having suggested its name. Underside also fairly well marked, though not so strongly as in typical *hypophasma*, which can, in some forms, be similar to *regulosa*, but has more minute antennal ciliation, a slightly brighter forewing, with the lines somewhat less regular, a better developed terminal line, etc. Not rare in the highlands of Kenya Colony.

semipallida. **E. semipallida** *Janse* (11 g) resembles *regulosa*, but the costal region of the forewing is more macular, the hindwing slightly narrower, paler and more weakly marked. Cell-spot of forewing strong, median and postmedian lines in fresh specimens fairly will developed, other lines very indistinct, only indicated by rather dense brownish irroration; fringe irrorated with fuscous. Palpus shortish-moderate. Antennal ciliation of the ♂ short S. Rhodesia: Bulawayo (type), Umvuma etc.

proflua. **E. proflua** *Prout.* 22—23 mm. Frontal tuft minute. Palpus 1½ or 1¾, heavily scaled above and beneath. Antennal ciliation of ♂ at least ½. Body pallid grey, mixed (especially on the abdomen dorsally) with brown. Forewing a trifle narrower than in *influa* (11 g), with apex appreciably more acute; ground-colour not quite so bright, brightest on a streak in front of the 1st radial and a narrower one about the 2nd postmedian; cell-dot black, moderate or rather small; lines weak, especially the proximal ones, the postmedian rather more acutely angled at the 1st radial than in *influa*, darkened from here to 3rd radial, then very weak. Hindwing rather more elongate than in *influa*; no definite markings above except a small spot at anal angle, beneath with a small cell-dot and traces of several thick bnt not sharp brownish lines, a subterminal one rather distinct, somewhat macular, ending in a dark spot at anal angle. Kilimandjaro, a pair, taken at 2600—2800 m.

influa. **E. influa** *Prout* (11 g). Almost as large as *proflua*, which see for the differentiation. Ground-colour of forewing more evenly diffused, whitish admixture showing chiefly in and just beyond the cell and behind the proximal part thereof and in the (indefinite) bisected band just outside the postmedian. Hindwing with the lines faintly traceable above, as well as beneath; the tornal spot undeveloped. Lower forests of Mt. Kenya, at 2400 m.

anguinata. **E. anguinata** *Warr.* (11 h). Forewing with apex and tornus sharper than in the *celatisigna* and *infelix* groups, slightly browner, more strongly marked, the acute (V-shaped) angle of the median line particularly characteristic, recalling that of *rosmarinata Mill.* (Vol. 4, pl. 13 o); whitish subterminal spot at fold present. Kenya Colony: Kikuyu Escarpment, the type ♀; El Burgon, a good ♂ — antennal ciliation not quite as long as the diameter of the shaft.

ptychospila. **E. ptychospila** *sp. n.* (11 g). Head lost. Body concolorous with wings, the abdomen above a little more variegated with brown, the slight crests partly white. Forewing exceptionally long and narrow, but differing somewhat in shape from that of the other narrow-winged species (such as *mendosaria*) in having the termen appreciably less long than the hindmargin; 2nd median exceptionally distally placed at its origin, arising perpendicularly and curving very strongly; cell-dot sharp, but not elongate; lines rather weak, the proximal ones (as far as cell-dot) marked with darker dots or dashes on median and submedian veins and on the folds, acutely angled at cell-fold; postmedian double, dentate anteriorly but here very weak, apparently much less acutely angled close to costa than in most narrow-winged *Eupithecia*; an extremely conspicuous subterminal black dash on fold; terminal line weak and interrupted. Hindwing very bluntly pointed at 2nd subcostal; no definite markings, the most noticeable dot (or spot) placed close to tornus. Markings beneath extremely faint, cell-dots present. Madagascar, probably Betsileo (Hildebrandt), type ♂ in Zool. Mus. Berlin.

tatoptera. **E. tatoptera** *Prout.* 26 mm. Larger, longer and narrower winged than *lugubriaria* and *infelix*, rather less dark, the whitish tornal spot of the forewing less developed. Palpus 1½. Forewing with costa somewhat more curved than in most of the narrow-winged African *Eupithecia*, hindwing long and narrow, termen only

moderately convex and with a faint sinuosity behind the 1st radial, the tornus rounded. Colour of forewing brownish drab, costally and terminally more cinnamon-drab, and with an ill-defined longitudinal fuscous patch at apex; cell-dot small; lines mostly weak, the most characteristic being the postmedian, which is conspicuous from fold to 1st radial, where it is very steeply best inward, a little thickened behind the bend. Hindwing paler, except at abdominal and distal margins. Mount Kenya, at 2800—3200 m, only the type ♂ known.

E. infelix *Prout* (11 g). Palpus moderate. Ciliation of ♂ antenna minute. Not quite so narrow-winged as *celatisigna*, which it resembles in coloration and several particulars. The conspicuous black cell-mark of the forewing, ringed with white scales, the white admixture on the thickened black part of the postmedian line (1st to 3rd radial) and the angular white subterminal marks, filled-in with black proximally, are the principal features. Hindwing not greatly paler than forewing; a white spot at its anal angle often conspicuous. Distributed in the Transvaal and extending at least to the eastern part of Cape Colony. *infelix*

E. infausta *Prout* (11 g). Close to *infelix*, perhaps a race of it, on an average smaller; wings somewhat narrower. Forewing with the cell-dot smaller, more conspicuously white-ringed, postmedian line perhaps less acutely angulated, subterminal white marks as a rule less angular, their black accompaniment weaker. Hindwing very weakly marked, the fringe scarcely chequered. Cape Town. *infausta.*

E. bolespora *sp. n.* ♀, 20 or 21 mm. Face fuscous, spotted with white. Palpus long (rather over 2), fuscous, 2nd joint with a projecting tuft, 3rd joint moderate, distinct. Thorax above largely pale, mixed with whitish. Forewing moderate, apex not acute, termen well curved; glossy grey-brown, with a tinge (particularly in distal area) of cinnamon-drab; markings represented by much broken white lines; basally 3 are indicated (interruptedly) across the wing and form dashes on median vein and fold; the last of them (the antemedian) is slenderly angled outward in the cell; median strongest costally and in a strong bend outside the obscure cell-spot (which is accompanied proximally by another white spot), obsolete behind; postmedian and subterminal little bent, slender at each end, punctiform between, the postmedian closely preceded proximally by a strong white streak. Hindwing slightly paler, almost unicolorous, the only conspicuous spot being a small one close to anal angle. Fringe of both wings white-spotted proximally. Underside with white median and postmedian costal spots on forewing and subterminal and fringe-dots on both wings. Grande Comoro, 1884 (L. Humblot), a very perfect ♀ from the Oberthür collection. *bolespora.*

E. subvincta *Prout.* Somewhat similar to *tatoptera* in shape, but with the costal margin of the forewing less rounded, the termen of the hindwing not sinuate behind the 1st radial. The unique type, a ♀, is not quite so large (24 mm), the palpus rather longer (nearly 2), the breast less white, the forewing rather less glossy and more uniform (margins less cinnamon-drab), cell-mark more elongate, postmedian line anteriorly curved rather than angled, subterminal more obsolescent. Hindwing scarcely paler than forewing, the dark marking of abdominal margin weaker than in *tatoptera*. Underside very distinctive, being sharply banded, much as in typical *hypophasma*. Kenya: Aberdare Range, alpine meadows, 3000—3100 m. *subvincta.*

E. licita *Prout* (11 g). Variable, but easily known by its buff tone (generally nearer to the pinkish-"buff" than the "cream-buff" of Ridgway). Much less long-winged than the well-known *inconclusaria* (11 h), somewhat more glossy, the markings which give it its colour more band-like, particularly in the median area. which commonly forms a band on each side of the cell-dot, the bands occasionally so broad as nearly to meet; postmedian curved rather than angled; the characteristic dark posterior costal spot of *inconclusaria* undeveloped. Hindwing predominantly white. Antennal ciliation of the ♂ minute. Cape Colony, the type series from Clanwilliam. — **vepallida** *Prout.* Generally larger, the ground-colour of the forewing cleaner white, the two bands of the median area very well developed, the proximal one (at least in my examples) broadened, the white space between them conspicuous. Hindwing above and both wings beneath less weakly marked than in typical *licita*. Perhaps a species, as Janse notes a slight difference in the ♂ genitalia. Known from Knysna, Table Bay, Mossel Bay and Belvedere (Cape Colony) and from Prinzenbucht (S. W. Africa). *licita.* *vepallida.*

E. subconclusaria *Prout* (11 h). Possibly another form of *licita*, in which case I propose (as nearly all the known specimens are worn and it is omitted from Janse's excellent work on "The Moths of South Africa") that the name be sunk in the synonymy of *licita*. The ♂ antennal ciliation, however, appears to be scarcely so vestigial, the first two abdominal tergites are marked with brown, the wings are a little narrower (intermediate towards *inconclusaria*), the forewing shows a dark mark near the anal angle (occasionally developed in *vepallida*), the hindwing a (minute) cell-dot and traces of postmedian, and the underside more nearly the scheme of *vepallida*. Possibly, therefore, it will have to furnish the oldest name for the latter, with *vepallida* as a large race. Kalk Bay, several of both sexes. *subconclusaria.*

E. inconclusaria *Walk.* (= macropterata *Walk.*) (11 h). Antennal ciliation of the ♂ nearly as long as diameter of shaft. Further distinguishable from the *licita* group by its strongly elongate wings, characteristic costal markings, etc., from all the other known species of similar shape by its coloration. Cape Colony, locally common; also extending into S. W. Africa. *inconclusaria.*

irenica. **E. irenica** *sp. n.* (11 h). 24—26 mm. Face-cone slight. Palpus scarcely 1½. Antenna in ♂ lamellate and well ciliated. Abdomen above in places with rather bright brown clouding, the crest very slight; beneath very pale. Wing-shape recalling that of the Palaearctie *rosmarinata Mill.* (Vol. 4, pl. 13 o) except in the slightly more rounded costa of the forewing. Forewing with cell-dot very small, but slightly elongate; costal margin weakly spotted with brown; lines very weak and uncertain, in places marked with fuscous, outbent near costa and about fold, oblique inward behind 2nd submedian; subterminal fine and weak; fringe weakly dark-spotted. Hindwing with abdominal area at least as dark as forewing and well marked, distal area not quite as dark, the rest pale. Both wings beneath pale, with strong cell-dots and more or less strong outer markings. Cape Colony: Vredendal, 23—30 July 1927 (G. v. Son) 2 ♂♂, 3 ♀♀, type in Transvaal Museum: Matjesfontein, a large ♀ in British Museum.

infectaria. **E. infectaria** *Guén.* The largest South African *Eupithecia* and further distinguishable by the very long fascicles of cilia of the ♂ antenna and the *Collix*-like raised black scales of the cell-spot of the forewing, on which characters Guenée founded a separate genus *Lepiodes.* As the discocellulars of the hindwing are more or less biangulate, it is possibly a veritable transition towards *Eccymatoge*, which differs in the double areole, dentate hindwing and simpler ♂ antenna. Cape (type) to Transvaal, but apparently not common. — **immensa** *Warr.* (11 h) is still larger (35 mm), with the angulation of the discocellulars of the hindwing extremely slight and its 2nd radial arising nearer to the 1st than to the 3rd instead of central, but otherwise differs so little that it may best be regarded as a subspecies. Kikuyu Escarpment.

immensa.

sodalis. **E. sodalis** *sp. n.* was by oversight omitted from p. 101, next to *dilucida*. Variable, but — so far as has yet been ascertained — only distinguishable from some small forms of *dilucida* (♂ 17—18 mm, ♀ 20) by its relatively shorter wings, particularly manifest in the ♂. Structure nearly the same, palpus perhaps scarcely so long. The ♂ type has the head rather paler than in the others and scarcely shows the whitish abdominal band which is developed in them. Fernando Po (W. H. T. Tams), 2 ♂♂, 1 ♀.

23. Genus: **Chloroclystis** *Hbn.*

Probably derived from *Eupithecia* but very distinct in that the 1st subcostal of the forewing runs into the costal, or at the least anastomoses strongly with it, a very exceptional character in the *Larentiinae*. Areole always simple. Distributed almost everywhere in the Old World (see Vol. 4, p. 298). Of about 180 species yet described, about 20 are Aethiopian, to which 9 are here added; an endemic group with specialised costal margin in the ♂ accounts for a good proportion.

metallicata. **Ch. metallicata** *Fletch.* Length of a forewing not quite 6 mm. Palpus longish-moderate. ♂ antennal ciliation minute. In shape and markings very like a diminutive *nigella* (11 h), possibly a race of the same. The metallic scales perhaps even more copious. The amount of reddish admixture in the colouring seems rather variable. Seychelles.

nigella. **Ch. nigella** *J. Jean.* (11 h). Apart from the markings brought out in our figure, characterized by a sprinkling of metallic scales which it has not been found possible to reproduce. Underside grey, with the post-median line blackish, especially on the forewing. Palpus and antenna about as in *metallicata*. Altogether so closely similar to *inexplicata Walk.*, a little-known *Chloroclystis* from Borneo, and even *scintillata Prout* from Fiji, that one suspects it to be an insect of commerce. If not, an ancient form and much overlooked. Mauritius.

laetitia. **Ch. laetitia** *sp. n.* (11 h). ♂ unknown, but probably without special modifications of the forewing. Face-cone developed; palpus heavily scaled, nearly 1½ times as long as diameter of eye, dark-marked chiefly on outerside. The light-brown abdomen with a broad fuscous dorsal belt on the middle segments. Wings rather short and broad. Forewing with basal area light brown, very feebly marked except costally; the broad median area infuscated, though not uniformly, its sinuous white distal boundary line bent inward costally and at fold; outer area dark-mixed costally and terminally, the subterminal line narrowly connected with margin in front of the 1st median. Hindwing predominantly dark, but with sinuous, double, pale postmedian and a conspicuously paler terminal area behind the 3rd radial, somewhat variegated, quite white in front of 1st median. Underside glossy drab-grey, with ill-defined whitish postmedian and subterminal bands, commencing on forewing in white costal spots. São Thomé, November 1932 (W. H. T. Tams), 6 ♀♀ in the British Museum.

grisea. **Ch. grisea** *Warr.* (11 i). A small and inconspicuous species, broader-winged than *nigella*, much less well characterized than either of the three preceding, apparently representing the *recensitaria* (*Walk.*) group of the Indo-Australian Region. Hindwing with the margin less irregular than in most of them, yet with a quite noticeable sinus between the radials; colour somewhat browner than in most. Underside glossy, both wings with the postmedian and a pale band outside it distinct, other markings shadowy. Palpus moderate, nearly as in the European *rectangulata L.*, ♂ antenna scarcely ciliated. Coastal regions of East Africa, described from

Mombasa Island. I have seen a few similar forms (conspecific ?) in poor condition from several distant localities in continental Africa.

Ch. dietzei *Bastelb.* (11 i) may well be a form of *grisea*. Forewing narrow, elongate, with strongly pro- *dietzei.*
duced apex, hindwing with both angles almost rectangularly curved, termen with appreciable concavity; yellow-brown, tinged with olive-green, cell-mark of forewing elongate, oblique, the broad pale, bisected band separated from the ground-colour by 2 dentate dark lines. The type (a ♀) is from "Ito, Mozambique" (I believe a misprint for Ibo).

Ch. viridigrisea *sp. n.* (11 i). Expanse 15—18 mm. Differs from *grisea* in its slightly broader wings, *viridigrisea.*
olive-green tint (easily fading to dirty yellowish) and stronger subterminal line; which on the underside becomes a conspicuous pale band, dividing into two unequal parts the broad dark distal area which in *grisea* is almost solid. São Thomé, November 1932 (W. H. T. Tams), 2 ♂♂, 10 ♀♀, collected for the British Museum. Antenna of the ♂ better ciliated than in *grisea*, nearing half the length of the diameter of the shaft.

Ch. mokensis *sp. n.* (11 i). Expanse 15—16 mm. Likewise somewhat broader-winged than *grisea*, the *mokensis.*
♂ antennal ciliation less rudimentary, the sinuosities of the margin of the hindwing more pronounced (which is not the case with *viridigrisea*), that of the forewing also appreciably more irregular. A rather dark species, especially in the median area, thus recalling *Gymnoscelis birivulata* (11 m) though not quite so small. The suffusions are red-brownish, not greenish, the distal area with more extended dark cloudings than in *viridigrisea*, the postmedian line of the hindwing more irregular, the subterminal line beneath much less developed. Fernando Po: Moka, 28 January—3 February, 1933 (W. H. T. Tams), 2 ♂♂, 1 ♀.

Ch. consocer *sp. n.* (11 i). Very similar to *grisea* and of about the same size, or on an average a little *consocer.*
smaller. Structure closely similar; hindwing slightly more prominent behind the sinus, which therefore appears somewhat more conspicuous. Colour more greyish, the distal area of the forewing more uniform, scarcely showing the dark markings near costa and between the radials; median area generally with some rosy suffusion; postmedian line less dentate outward at the 1st radial; postmedian of hindwing less bent outward at the 3rd radial. Transvaal, Natal and Transkei, the type ♀ from Pretoria North, in my collection. Unfortunately *consocer* was misidentified in the British Museum as *consobrina* and in consequence got determined in the Transvaal collections as "*consobrina* ?" so that Janse has dealt with it under that name. He has described the ♂ genitalia and calls attention to the oblique course of the lines of the forewing as distinctive.

Ch. leighi *sp. n.* (11 i). A little larger than *grisea*, the termen of the forewing slightly more oblique, its *leighi.*
postmedian a little more strongly angled about the 1st radial, thereafter straighter, the sinuosity of the termen of the hindwing rather more pronounced, postmedian with less strong projections, underside a trifle paler and (especially on the forewing) with a distinct dark subterminal band in addition to the markings of *grisea*. Grande Comoro, August 1921 (G. F. Leigh), a series of 12 in the Tring Museum, one labelled as bred, but with no information regarding the earlier stages. Smaller forms of the same or a similar species, mostly in deplorable condition, were collected in abundance at Diego Suarez by G. Melou.

Ch. jansei *sp. n.* (= grisea *Janse*, nec *Warr.*) (11 i). Larger than *grisea*, of which the largest known *jansei.*
specimen (a ♀) has a forewing-length of only 7 mm, while in the smallest *jansei* known to me it reaches 8 mm. Palpus relatively shorter, scarcely reaching beyond the frontal tuft. Abdomen with a dark belt at base, of which there is no trace in *grisea* and *leighi*. Coloration and markings suggestive of the latter, except that the postmedian on each wing has 2 nearly equal projections; distal areas, both above and beneath, more strongly marked than in *leighi*; the subterminal perhaps less deeply dentate (few *grisea*, however, show it really well developed). Good structural figures are given by Prof. Janse in his fine work on the Moths of South Africa. Transvaal: Barberton, Waterval Onder and Pilgrim's Rest; also known from Port St. Johns; type ♂ from Barberton in my collection.

Ch. gymnoscelides *Prout* (11 i) is probably related to the four preceding, but shows a vinaceous ad- *gymnoscelides.*
mixture which gives it nearly the colour-combination of the European *Gymnoscelis pumilata Hbn.* Hindwing with termen smoother than in *grisea*; forewing of the ♂ with costa shouldered at base, here edged with numerous small hairs. Forecoxa in the ♂ covered with a patch of very broad metallic scales. Palpus about as in *grisea*. Natal (type) and Three Sisters, Transvaal. Perhaps very widely distributed, as a ♀ from Bibianaha, Gold Coast, seems to agree very accurately with it.

Ch. dentatissima *Warr.* (= nigrilineata *Warr.*, nom. praeocc.). Distinguishable by its light yellow- *dentatissima.*
brownish colour, absence of definite distal boundary to the pale band which succeeds the postmedian, approximated costal spots at the origin of the lines which bound the median area of the forewing, sudden widening of that area through the strong outward curve of the anterior part of the postmedian, and vein-dashes on the postmedian which give it a strongly dentate appearance. A very widely distributed island species, Ceylon to Australia and some of the Bismarck group. In Africa only known from New Hanover, Natal; I saw one

of the examples and could find no difference at all from the Indo-Australian, unless perhaps the wings were a trifle narrower. Probably introduced.

cryptolopha. **Ch. cryptolopha** *Prout*. Expanse 15 mm. Stumpier winged than *grisea*, but with the apex of the forewing fairly sharp, the distal margin curved, with faint suggestion of a sinuosity anteriorly, hindwing with shallow concavity nearly as in *grisea*. Drab, pale with darker irroration and markings, in places tinged with yellowish brown. Markings not very strong, similar to those of *grisea*. Distinguished by the underside of the hindwing, which is pale, with a large tuft of brown hair in and behind the posterior part of the cell and a much smaller patch of erect hair from the costal vein more proximally. Kilimandjaro at 800 m, only the ♂ type known.

catoglypta. **Ch. catoglypta** *Prout* (12 a). A much larger, pale greenish species, startlingly distinct on the underside. In addition to the strongly angled postmedian line (a slight exaggeration of that of the European *rectangulata L.*), this shows on each wing a row of black spots (not mere dots) from apex to 3rd radial, separated by clear white streaks midway between the veins. São Thomé, not rare.

desiderata. **Ch. desiderata** *Prout* (12 a). Nearly as large as *catoglypta*, brighter green, with less excurved postmedian line, some characteristic red markings and a conspicuous yellow-green longitudinal mark in cellule 3 of each wing near the margin. Underside grey, the dark markings suggestive of those of *rectangulata L.*, the *austerula.* pale streaks in cellule 3 shown in dirty white. São Thomé. — **austerula** *form.* (? *sp.*) *nov.* evidently represents *desiderata* on Principe. The smaller size (21 or 22 mm) brought about chiefly by the shortening of the costa of the forewing, the termen being conspicuously more rounded; colouring somewhat less bright, the characteristic pale subterminal mark very weak above, entirely wanting beneath. Only known from 2 imperfect ♀♀, collected by W. H. T. Tams. I find, too late for revision, that *desiderata* is a *Gymnoscelis*.

flaviornata. **Ch. flaviornata** *sp. n.* (12 a). Head cream-buff. Palpus about 1½, 1st and 2nd joint each with a black spot on outerside. Collar more orange. Thorax and abdomen above variegated. Forewing grey, with a decided tinge of deep plumbeous; cell-mark moderately elongate; characteristic bisected pale yellowish bands, largely suffused with grey, bound the median area, which bears, especially in its central part, pale rippled lines; the whitish-grey, deeply dentate subterminal line mixed in cellule 3 with yellow and accompanied distally by a yellow terminal spot; termen and base of fringe with yellowish dots at veins. Hindwing similar, the median rippled lines suggesting a pale bisected band. Underside rather paler, the markings more blurred, both wings more suffused with ochraceous-buff at base. Marungu Plateau, S. W. of Lake Tanganyika, 7000 feet, February 1922 (T. A. Barns), the type ♂ only.

protrusata. **Ch. protrusata** *Warr.* (12 a). Characterized by the strongly arched costa (which shows a transition towards the following group) combined with highly sinuous hindwing termen and postmedian; underside very strongly glossy, weakly marked, especially the forewing. Palpus longish-moderate; ♂ antenna scarcely ciliated. Founded on a series from the Kikuyu Escarpment.

sierraria. **Ch. sierraria** *Swinh.* (= insignifica *B.-Bak.*) (12 a). Another *Gymnoscelis*-like species, the ♂ forewing fairly broad, its costa swollen and slightly tufted near the base; the ♂♂ are even smaller than the ♀ as here figured. Hindwing as irregular as in *protrusata*. This and the extreme projections of the postmedian line will distinguish it from the *grisea* group. Sierra Leone to Angola.

lita. **Ch. lita** *Prout* (12 a). Rather variable in size and in the degree of darkening of the median area of the forewing, which oftener than not suggests a pretty definite brown band. The ♀♀ in this and most of the following species are very similar, the ♂♂ separable chiefly by the costal specialisations of the forewing. In *lita* ♂, as in the entire group, the forecoxa bears a strong hair-tuft; but the costa of the forewing is almost simple. Natal (the type series from Estcourt) and Cape Colony.

derasata. **Ch. derasata** *Bastelb.* (= ? lita *Janse*, part., nec *Prout*) (12 a). A small species, easily differentiable in the ♂ from *lita* by the strongly shouldered costal margin of the forewing. The type, a ♂ from Loucoube, Madagascar, is unfortunately rubbed, but our figure of it will give the shape, the course of the postmedian *chlamydata.* markings and other essentials. We figure also a good ♀ from Diego Suarez. — **chlamydata** *J. Joan.* (12 b) is certainly close to *derasata*, probably synonymous, but I have only seen from Mauritius (the type locality) 3 ♀♀ and the figure and description of the ♂ suggest that it may have the costa of the forewing still more strongly shouldered proximally, thence very straight to the apex. Somewhat larger than normal *derasata*, expanding about 17 mm (Warren, MS., on one of the types; by an evident mistake, Joannis wrote "9 mm"). Forms of the collective species from continental East Africa (Natal to Rhodesia, perhaps to Uganda and Kenya) are also larger than the Madagascar race, but I will not give them a separate name until I have studied more material from Mauritius. Even in Angola, nearly the same form occurs as in Rhodesia. A small ♀ from Bourbon (Reunion) in the British Museum should perhaps be *chlamydata* rather than *derasata*.

consobrina. **Ch. consobrina** *Warr.* (12 b). Wings in the ♂ short and broad, the costal margin of the forewing straightish in the proximal part, about the middle becoming swollen and prominent, the end of the contorted part bearing

a small bunch of hair-scales. ♂ antennal ciliation, as in the entire group, very short. São Thomé. The ♀, unless any other member of the group should hereafter be discovered on the island, can safely be determined by its small size and general resemblance to the ♂ in markings. — **sylleptria** *subsp. nov.*, representing *consobrina* in continental West Africa (Senegal to Nigeria, probably also further south) is darker, the median band fuscous instead of dull reddish, a dark subbasal band generally developed on the hindwing, postmedian of that wing more acutely angled; costal swelling and tuft slightly stronger than in *consobrina*. Type a fine ♂ from Sierra Leone, in coll. Brit. Mus. *sylleptria.*

Ch. dexiphyma *sp. n.* (12 b). Expanse 16—19 mm. Broader-winged than either of the preceding members of the group, duller or darker than in most of them. Median band of the forewing narrow at the costa, irregularly expanding. Forewing with costal margin very strongly convex, ♂ with the "nibbled" excision (as Warren describes it under *muscosa*) rather deep and concise; hindwing with termen rounded, the terminal maculation between the radials almost as strong as on forewing; both wings with dark terminal dashes. Underside glossy, infuscated. Principe Island, fine series collected by T. A. Barns and by W. H. T. Tams. *dexiphyma.*

Ch. peremptata *Walk.* (12 b). Founded on a ♀ from Sierra Leone which was evidently in good condition when collected but subsequently broken to pieces, so that I have had to judge it from head, thorax and wings gummed on to a piece of card. I believe, however, that I have correctly determined other ♀♀, from the same locality and the Ivory Coast, which agree with it in having the costal margin of the forewing faintly swollen at the origin of the antemedian pale band. Hindwing regularly rounded. The type is fairly large and does not show conspicuously whitish mid-terminal spots, but these characters are prone to vary. By analogy with the sex-dimorphism in *tumefacta*, I am fairly confident that I have found *peremptata* ♂ in a Sierra Leone specimen in the British Museum, unfortunately very much worn. If so, it has a similar (or somewhat stronger) costal swelling to that of *muscosa* ♂ but is smaller and with the concavity in the margin of the hindwing somewhat shallower than in that form and *tumefacta*. Possibly *peremptata* is the oldest name for a collective species. *peremptata.*

Ch. muscosa *Warr.* (12 b). Generally the largest species (or form) in the group, rather variable, but with the antemedian line characteristically geniculate behind the fold. Costa of ♂ forewing with a twisted hairy swelling beneath which at first (opposite the middle of the cell) projects sufficiently to show as a slight protuberance when viewed from above, then curves downward (opposite the proximal end of the areole), suggesting from above a slight "nibbled-out" concavity, finally making a small ridge, which gradually dies down. Hindwing with postmedian from the radials to the hindmargin strong, partly marked with blackish wedges. Founded on a long series from the Kikuyu Escarpment. — **kampalensis** *subsp. nov.* is somewhat shorter-winged, the costal swelling, as viewed from above, showing a somewhat stronger and more proximally placed lobe ad its commencement, the hair more mixed with reddish; forewing in the ♂ typically less strongly marked, more olive-grey, the postmedian less strongly dentate in its anterior part; hindwing with the postmedian almost equally strong throughout. Uganda: Kampala (H. Hargreaves), the type ♂; Kabale (G. H. E. Hopkins), a pair, the ♀ much discoloured; all these examples have been presented to the British Museum through the Imperial Institute of Entomology. Perhaps a separate species, or a race of *peremptata*. — **tumefacta** *Prout* (12 b) is smaller than *muscosa* (17—20 mm). Forewing in the ♂ with the costal lobe and hair-tuft, proximally to middle stronger; coloration duller, antemedian line less irregularly curved. Hindwing on the whole more sharply marked. Fairly common in parts of Natal, particularly the Durban district; known to me also from Cape Colony and perhaps Nyasa. Should probably rank as a species. *muscosa.* *kampalensis.* *tumefacta.*

Ch. marmorata *Warr.* (12 b) differs from the *muscosa* group in that the costal lobe of the ♂ is opposite the median band, i. e. at least as distally placed as the proximal part of the areole; the lobe, moreover, is chiefly on the upperside of the wing (as is also its distal continuation) and the rough hair-scaling which arises from it projects forward and upward. The ♀♀, so far as they are yet known to me, have always a well-defined, more or less dark median band on the forewing. Only certainly known to me from Southern Nigeria, but I believe I have also seen it from the Ivory Coast. *marmorata.*

Ch. toreumata *sp. n.* (12 b as „*tereumata*"). No doubt near *marmorata*, on an average perhaps smaller, the apex of the forewing more rounded; but remarkably distinct from that and from all known species in the singular disc-like developments of the costal lobe of the ♂ forewing and the tufts and masses of coarse hair which accompany and in large measure cover it. Both upper- and underside participate in these developments, but particular attention may be called to a roundish plate-like flap which is attached to the lobe beneath and reaches back nearly to the areole; the cell is narrowed to compensate for these costal developments. Forewing beneath finely striated throughout, the striae transverse. The extreme V-like angulation on the postmedian of the hindwing is inconstant both in *toreumata* and in *marmorata*, but less frequent there than here. Comoro Islands, general, the type ♂ from Anjouan, 29 June 1911 (G. F. Leigh). Also from Madagascar, at least in the Tananarivo district and at Diego Suarez. I do not known how to distinguish the ♀ from that of *derasata* (12 a), unless perhaps the angle of the postmedian of the hindwing is more acute. *toreumata.*

subcomosa. **Ch. subcomosa** *Warr.* (12 c ♂ and ♀). The ♀ is easily distinguished from those of the rest of the group by the particoloured median band of the forewing, generally reddish (occasionally more fuscous) as far as fold, green behind. The ♂ shows the same colour-scheme on the forewing, but is again remarkably specialised, forming the "genus" *Mesocolpia Warr.* Besides the long, stiff midcostal fringe and the peculiarities of shape, which may be seen from our figure, the underside is very noteworthy: forewing mostly striated, much as in *toreumata*; hindwing with costal region expanded, cell very short, the region distally to it partly nacreous, puckered and contorted, terminally (especially near tornus) tufted, anterior part of termen with some specialised scaling. São Thomé, the ♂ very rare, the ♀ rather less so.

exilipicta. **Ch. exilipicta** *J. Joan.* (12 c). A pretty and — so far as the African fauna is concerned — unmistakable species. I have recently described from Fiji a very closely similar species which will be dealt with in Vol. 12. Although much less specialised than most the preceding group, *exilipicta* ♂ has a costal fold on the underside of the forewing, proximally fringed with hair-scaling. Hitherto only known from Mauritius; I have found, however, a ♀ from Reunion in the Oberthür collection.

24. Genus: **Camelopteryx** *Joan.*

Antenna of ♂ ciliated. Hindtibia with all spurs. Abdomen with small crests. Forewing of ♂ with a strong convexity before middle of costa, apex rounded; venation nearly as in *Chloroclystis*, stalk of 1st subcostals arising very near base, anastomosis of 1st subcostal with costal short, 5th subcostal parallel with stalk of 2nd—3rd and with 1st radial; 2nd subcostal of hindwing not stalked. Almost certainly a further section of *Chloroclystis*; one of the chief distinctions which Joannis believed to have noticed (1st subcostal not anastomosing) was an error of observation. Only one species.

multicolor. **C. multicolor** *J. Joan.* (12 c). Unmistakable in the shape of the forewing. Variable as regards the presence or absence of the green element in the wings. Mauritius.

25. Genus: **Gymnoscelis** *Hb.*

An offshoot of *Chloroclystis*, not (or not directly) of *Eupithecia*, as stated in Vol. 4, p. 298, only definitely distinguishable by the loss, total or almost total, of the proximal spurs of the hindtibia. The palpus shows some different forms, the build is sometimes more slender, with wings narrower, the green colouring not prevalent, the 1st subcostal of the forewing much more usually merely anastomosing with the costal than running into it, extreme specialisations of the ♂♂ much rarer; but none of these distinctions is essential. The genus is chiefly Indo-Australian, but straggles into Europe and Africa. The supposed North American representatives have been assigned a separate genus, *Nasusina*. Africa certainly produces several species, but in some cases they have only been taken singly and in poor condition, so that it would be worse than useless to multiply descriptions: even of those which have already been described, some are still very ill-known.

tenera. **G. tenera** *Warr.* (12 c). A tiny species (9—14 mm), in tone and markings somewhat recalling the very weakest-marked forms of *pumilata Hbn.* (Vol. 4, p. 298), perhaps relatively somewhat narrower-winged. It may be briefly described as reddish grey with broad white lines (no fuscous shades). Described from Ogruga, River Niger; reaches Senegal. I have also seen it from Kenya Colony (Beira, bred from maize), S. Rhodesia and Transvaal; presumably an "insect of cultivation".

birivulata. **G. birivulata** *Warr.* (12 c). Size of the largest *tenera* or scarcely larger, wings broader and much darker; hindwing with a small terminal concavity, so as to recall a small dark *Chloroclystis grisea*. Described from the island of São Thomé; I think known also from Principe.

crassata. **G. crassata** *Warr.* (12 c). Less small (16—19 mm), relatively longer-winged, the hindwing regularly rounded. Characterized by the very strong outward bend of the postmedian of the forewing, culminating in a more or less sharp angle at the 3rd radial. The type ♀ is rather clear brownish, with the ante- and postmedian sharply defined as narrow dark bands; the rest of the original series (São Thomé) much less variegated. A few poor specimens from Ivory Coast, Gold Coast and Nigeria probably belong with it. — On Madagascar, *varians.* about Diego Suarez, it reappears in abundance in a variable race which I name: **varians** *subsp. nov.*, with the forewing slightly more produced anteriorly, nearly always strongly marked, the postmedian showing the band-like development of *crassata* type, but with more clouding in the distal area. In some examples the ante- as well as the postmedian shows a sharp angulation, but as these may possibly represent a different *tripartita.* species I have chosen as type a ♀ in which it has just the same form as in *c. crassata*. — ab. loc. **tripartita** *nov.* (12 d) is a pretty form, with the proximal and distal areas of the forewing heavily suffused with fuscous; founded on 8 ♀♀ from Diego Suarez which, together with the type series, belong to the Tring Museum.

olsoufieffae. **G. olsoufieffae** *sp. n.* Considerably larger than *crassata* (22 mm), palpus with terminal joint rather sharply pointed, abdomen (♂) considerably elongate, approaching that of the *acutipennis* (11 e) group, wings

longer and narrower than in *crassata*; forewing with the antemedian weak, suffused, postmedian not thickened. its angle appreciably behind the 3rd radial, acute, followed by a rather strong inward curve between this point and a second prominence behind the fold; hindwing with the postmedian almost direct, except for a strong indentation at the radial fold; both wings with a whitish spot behind the 3rd radial close to termen. Nanisana, near Tananarivo, December 1931 (Mme. N. d'Olsoufieff), a good ♂ in the Tring Museum. Discoloured specimens from Lorenzo Marquez and Port St. John (Pondoland) are in the British Museum.

G. rousseli *sp. n.* (12 d). Near the preceding, or intermediate between that and *crassata*, but with a fleshy tone that is wanting in both. Further characteristics are the costal spots at the beginning of the lines of the forewing and the very strong outward bend of the postmedian of the hindwing at the radials. Bourbon (Réunion) (Dr. Roussel), a ♀ from the Oberthür collection. *rousseli.*

G. carneata *Warr.* agrees with *acutipennis* (12 d) in shape and essential markings but is a little smaller with a fleshy rather than an olivaceous tinge, the heavy cloudings in the anterior part of the forewing wanting (though the postmedian and the subterminal do arise from blackish costal spots), the postmedian of the forewing scarcely inbent at the fold. Both species show, in the ♂ type, a longitudinal streak about the radial fold of the forewing and indications of a second about the submedian fold, but these marks are inconstant. Kikuyu Escarpment, a pair collected with *acutipennis*. *carneata.*

G. acutipennis *Warr.* (12 d) cannot be confused with any other known species. The ♂ has almost exactly the same markings as the ♀ (unless the distinction noted under *carneata* be definitely sexual) but has considerably narrower wings, the forewing more pointed, and exceptionally elongate abdomen (about 6,5 mm). Kikuyu Escarpment. *acutipennis.*

G. idiograpta *sp. n.* (12 d). Head pale. Palpus nearly 1¾. Antennal ciliation in the ♂ extremely minute. Spurs of hindtibia very unequal, especially in the ♂. Build and coloration just as in *acutipennis*, underside nearly as in that species, markings of the forewing above almost restricted to the two large costal spots, the antemedian very oblique and tapering, the subbasal band of the hindwing stronger than in *acutipennis*, the postmedian less sinuous, with less red shading proximally. São Thomé (W. H. T. Tams), 4 of each sex. *idiograpta.*

26. Genus : **Lobidiopteryx** *Warr.*

One of the few African representatives of the *Lobophora* group of genera (see Vol. 4, pp. 181—187) distinguishable from *Nothopteryx Prout* chiefly in that the costal vein of the ♂ hindwing is not approximated to the subcostal for so long a distance but begins to diverge well before the end of the cell; the connective bar is, in consequence, more proximally placed, sometimes scarcely beyond middle of cell; 2nd subcostal of this wing generally stalked in the ♂, or at the most only just separate (in *Nothopteryx* generally at its origin well separate from 1st radial); 2nd radial of both wings arising well before the middle of the discocellulars. Palpus moderate to short. Hindtibia, as in most of the group, with terminal spurs only. Outer areole large and broad. All the species are closely related.

L. veninotata *Warr.* (11 k), the type of the genus, is easily recognizable from our figure. Larger than the other species, brightly coloured, with black cell-dots and characteristic black dashes on the veins. Palpus moderate. Founded on a good series from the Kikuyu Escarpment. — **antithetica** *subsp. nov.* has the markings (including subbasal band) very strong on a pale ground, hindwing whitish, palpus less blackened (merely pale with black dots) on outerside. Katana, W. Kivu, 5000—7000 feet (T. A. Barns), a fine ♂ in the British Museum. *veninotata.* *antithetica.*

L. aurivilliusi *sp. n.* (= veninotata *Auriv.* nec *Warr.*) (11 k). Slightly narrower winged than *veninotata*. Forewing with termen straighter, cell-spot and marks on the veins not black, proximal band of the median area at its darkened posterior part at least as strongly oblique outward as the distal band thereof; fringe weaker-marked than in *veninotata*. Hindwing with 2nd subcostal better stalked, 2nd radial from not quite so near 1st; very noticeably whiter than in typical *veninotata*. Kilimandjaro: Kiboscho, at 3000 m, in February (Sjöstedt), type ♂ in the Zoological Museum, Berlin, being one of a series of 6 ♂♂, 1 ♀, misidentified by Aurivillius as *veninotata*. *aurivilliusi.*

L. eumares *sp. n.* (11 k). ♂ 34—37 mm, ♀ 38—41 mm. Also very similar to *veninotata*. Palpus a little shorter, with less black marking. Wings slightly less elongate; forewing not green, lines firmer, their course somewhat different, the characteristic black dashes not developed. Hindwing in the ♂ at least as clear white as in *aurivilliusi;* its 2nd subcostal about connate with the 1st radial. The type ♂, from Impetyeni Forest, Natal, 3 September 1920 (coll. Janse) is somewhat more warmly coloured than the other examples, which are from Malta (Pietersburg) and Marieps Mountain, Transvaal, collected by Mr. G. van Son and submitted to me by the Transvaal Museum. We figure a ♀ from Marieps Mountain. *eumares.*

stulta. **L. stulta** *Prout* (11 k). Close to *eumares*, though the palpus appears to be a little shorter still and the 2nd subcostal of the ♂ hindwing is m o r e (not less) stalked than in *veninotata*. Coloration yellowish olivaceous, the markings weaker than in any of the preceding; antemedian of forewing more angled inward at the fold than in *eumares;* hindwing as free from markings as in that, but of a much less clean white. Belgian Congo.

thomae. from Ituri Forest to the region N. W. of Lake Kivu. — **thomae** *Prout* (11 k), from São Thomé, is so similar to *stulta* that I have treated it provisionally as a subspecies. The ♂ smaller. Abdominal tergites posteriorly with rather distinct white belts, bearing paired black spots. Ground-colour of forewing whiter, with the lines rather pale grey-green, with some tendency to develop the black vein-marks of *veninotata* (but as dots rather than dashes). Hindwing slightly greyer (less yellowish) than in *stulta*, a fine grey postmedian line sometimes traceable. The ♀ is less heavily marked than the ♂ and generally larger.

27. Genus: **Episteira** *Warr.*

To this genus, which properly consists of a few Indo-Australian species, may be temporarily referred two somewhat anomalous African ones, the second new, the first originally described (on the ♀ only) as a doubtful *Remodes* and transferred by Janse to *Sauris*, but which has (though rudimentary) the pouch-like process at the base of the abdomen beneath — called by Warren a "keel" — the extremely long palpus, spurless ♂ hindtibia, simple areole and reduction of veins in the hindwing which characterize *Episteira*. The discocellulars of the hindwing, however, are biangulate (in the ♂ sometimes only weakly) and there are other divergences.

confusidentata. **E. confusidentata** *Warr.* (12 d). Excepting one or two *Lobidiopteryx*, which can readily be distinguished by the palpi and other structural characters, there is no known African species with which this and its immediate allies could possibly be confused. The definitely green forewing (whitish green with a multitude of almost regularly distributed — but sinuous or dentate — yellowish olive lines) is more like that of several Indo-Australian *Sauris*. True *confusidentata*, from Natal (and since recorded from East London and Port Elizabeth and seen from Table Mountain and Malta, Pietersburg), has in the ♂ the abdomen strongly elongate, hindtibia with a vestige of one terminal spur, hindwing much narrowed, its costal margin folded over beneath (so as to reach, at its widest part — just outside the cell — as far as the 1st radial), its humeral region folded over above, affording a base to a spreading hair-pencil which covers the anterior part of the cell, the cell mostly hyaline, contorted beneath, and with a moderate, appressed lobe above, a small tuft of hair at the abdominal margin beneath, arising from the vestigial 1st median, the only well-developed veins being the three radials. The ♀ hindwing has the normal Larentiid venation. Walker, in 1862, treated a worn specimen as a variety of his *Sauris proboscidaria* of Ceylon. Some large, broad-winged ♀♀ from the Kikuyu Escarpment (6500—9000 feet) are perhaps also true *confusidentata*. Single ♀♀ from São Thomé and Fernando Po may also represent races either of this or of the following; the former has heavy black spots on the subterminal, the latter a conspicuously darkened median area.

frustrata. **E. frustrata** *sp. n.* (12 d) is rather small and weakly marked, but would have been taken for a race of the preceding but for the differences in the ♂ structure: abdomen somewhat less elongate, basal pouch beneath somewhat less rudimentary, probably accomodating a better developed pencil from base of hindcoxa than is found in *confusidentata*, hindtibia with a minute node in place of the vestigial spur; hindwing with costa scarcely folded beneath, merely thickened so as to absorb the costal vein, 2nd subcostal developed, short-stalked with 1st radial, cell beneath smoother, lobe above rather smaller, perhaps less appressed, pencil from base not covering any part of it, hair-tuft of abdominal margin denser, arising just proximally of 1st median. Nairobi. 1 ♂, 2 ♀♀, the type ♂ (F. J. Jackson, December 1905) in the Tring Museum.

atrospila. **E.** (?) **atrospila** *Strand* certainly belongs to the *Lobophora* group. The figure and description suggest a *Lobidiopteryx;* but as Strand indicates that it has some of the characteristics of a *Eupithecia* it should have the areole undivided, and the better rounded wings, with tolerably direct transverse markings on the forewing, may rather point to a ♀ *Episteira*, in which case the palpi must have been lost. Forewing 17 mm in length, 8 in breadth; dirty ochreous, with indistinct lighter wavy lines, 4 or 5 each in basal half and distal area, those of the latter parallel with termen, the others weakly concave on proximal side, parallel inter se; median band also with a few pale lines, but these interrupted by two subtriangular blackish patches, one at base of cellule 2, underlined by 3 deep-black dashes on 2nd median, the other covering the bases of cellules 4 and 5; indications of a dark line near termen, also some dark vein-dashes; termen with paired dots at the veins (as in *Lobidiopteryx*). Hindwing pale fawn-grey (probably as in *confusidentata*). Founded on a ♀ from Bonaberi, Cameroons. Possibly near the Fernando Po form of *confusidentata*.

africana. **E.** (?) **africana** *Auriv.* described as *Sauris*, is likewise unknown to me, but according to the figure and description must be superficially very similar to the two preceding, probably best distinguishable from *frustrata* (12 d) by the less oblique termen of the forewing, less reduced and not crenulate-margined, "more whitish" hindwing, still less sinuous and more equally expressed lines and absence of cell-dot. Hindtibia of the ♂ with terminal

spurs, a "small upcurved lappet at the base" of the hindwing (no mention of any other specialisation), "vein 3 present". Dark vein-spots or streaks on the forewing chiefly developed at the costa, on the 2nd submedian, at the base of the 2nd median and in the distal area. Kilimandjaro, 1 ♂, expanding 29 mm from tip to tip in the set specimen.

28. Genus: **Protosteira** *Prt.*

Related to the African "*Episteira*", with similar characters as regards palpus, abdominal pouch, ♂ hindleg, areole, etc., but with short antenna, long and narrow wings, etc. Hindwing in both sexes with the costal vein anastomosing strongly with the cell, 2nd subcostal stalked, discocellulars not biangulate, 2nd radial from before the middle, 1st median stalked (in the ♀ sometimes separate); ♂ with cell wholly hyaline, 2nd median and submedian wanting, this part of the wing folded over above to form a lappet. Forewing of ♂ beneath in the type species with a patch of specialised scaling on the end of the median and the bases of its 1st branch and of the 3rd radial, evidently correlated with the larger patch on the hindwing above which is conspicuous in our figure. Only one species hitherto known; we are able to add a second.

P. spectabilis *Warr.* (12 d). Unmistakable through the structural characters and the coloration of the ♂ hindwing; a secondary fold at the base of the lobe is clothed on its edge with long hair. ♀ much duller, the forewing olive-greyish, hindwing somewhat more drab. The type came from Natal, subsequent material from Transvaal, Kenya, Uganda and even Madagascar and the Comoro Islands. *spectabilis.*

P. achroa *sp. n.* Expanse 32 mm. Palpus with the hair above less long than in *spectabilis*. Wings a trifle less narrow, drab-grey (the hindwing the paler), without any tinge of green or of reddish and without the dark central patch. Hindwing with the 1st median longer-stalked; the lobe not hairy, but strongly recalling that of some Indo-Australian *Sauris* (e. g. *arfakensis Joic. & Talb.*). Fernando Po: Moka, 2 February 1933 (W. H. T. Tams), 1 ♂ in the British Museum. A ♀ from São Thomé, in poor condition, mentioned in Trans. Ent. Soc. Lond. 1927, p. 193, is of a more whitish grey, but seems evidently to belong here; 1st median of hindwing well stalked. *achroa.*

29. Genus: **Aposteira** *gen. nov.*

Related to *Protosteira*. Palpus still longer (5 or 6 times diameter of eye), moderately rough-haired. Hindleg of the ♂ long, spurless, without pencil. Abdomen without pouch at base. Forewing of moderate width, distal margin scarcely oblique anteriorly, curving to become moderately oblique; venation approximately as in *Protosteira*, fold strongly curved forward, closely approaching median vein and its 2nd branch, separated therefrom by a noticeable furrow (upperside) or ridge (underside). Hindwing rather short, less narrow than in *Protosteira;* venation similar, but with 1st median well separate; the lobe much as in *P. achroa* but somewhat more erect, reminding of *Sauris (Tympanota) erecta Warr.* (Borneo). Genotype: *A. saurides sp. n.*

A. saurides *sp. n.* (12 d). Unlike any other known species. The dirty yellowish-olive forewing (probably greener when quite fresh) shows the oblique black cell-mark and a few other irregular black markings, but the general effect is very uniform except costally (where a pale patch stands between the beginnings of ante- and postmedian bands) and terminally (where the strong marginal spots are preceded by a scarcely interrupted dark line and a whitish spot at anal angle). The shape and character of this wing recall some *Sauris*, as, for example, *S. coalita Prout* (1931), except in the absence of a strong subbasal mark. Madagascar: Fianarantsoa (Perrot brothers), a ♂ from the Oberthür collection. *saurides.*

30. Genus: **Trimetopia** *Gn.*

Another very distinct genus. Its superficial aspect deluded Guenée into placing it among the *Hemitheinae*. Face smooth. Palpus minute. Tongue wanting. Antenna in both sexes strongly bipectinate. Hindtibia with terminal spurs only. Forewing with areole simple. Hindwing with discocellulars biangulate, costal vein free, approximated to subcostal at middle third of cell; probably a connective bar, which is retained in the Palaearctic genera *Sparta* and *Leptostegna*, has been lost, the close approach of costal to subcostal rendering it unnecessary (compare *Odezia*, which I now suspect Herrich-Schaeffer may have been right in associating with the *Larentiinae;* see Suppl.-Vol. 4, p. 2). There is probably only one species.

T. aetheraria *Guen.* (12 e). Rather thinly scaled, of a delicate bluish grey, the white lines variable in position. Founded on Abyssinian specimens, it is now known to be widely distributed in Central and East Africa and reaches southward to Southern Rhodesia. — **coerulea** *Warr.*, founded on a single ♂ from Lamu, Kenya Colony, is probably nothing more than an extreme aberration, unusually small (scarcely 26 mm), perhaps somewhat narrower-winged than usual, the lines slender, not very sharply expressed, the position of the postmedian uncommonly distal. *aetheraria.* *coerulea.*

31. Genus: **Hydrelia** *Hbn.*

A widely distributed genus, characteristic chiefly of temperate regions, its genotype the Palaearctic *testaceata Don.*, see Vol. 4, p. 267 (further information will be given in Vol. 12). The smooth face (rare in the *Larentiinae* excepting the present group and that of *Sauris*, with its long palpi), the simple areole of the forewing and simple discocellulars of the hindwing are generally sufficient characters for its discrimination. It is possibly connected by *Eois* (p. 83) with the *Sterrhinae*, but that genus has the areole much reduced or wanting, the 1st subcostal of the forewing arising beyond the 5th, the 1st median of the hindwing stalked and the antenna, at least in the ♂, generally strongly bipectinate, while *Hydrelia* has as a rule much more nearly the structure of *Asthena Hbn.* (Vol. 4, p. 271), through which it is connected with the more typical *Larentiinae*. The African representatives of *Hydrelia* belong chiefly to the mountains and incline to form transitions to the genus (or section) *Asthenotricha:* see below.

costalis. **H. costalis** *Auriv.* (12 e). A glossy white, grey-marked species, beneath with the grey colour becoming predominant, with a narrow, sharply defined white band just outside the cell. Kilimandjaro, 2700 m and upward.

candace. **H. candace** *Prt.* (12 e) is near the common *argyridia* (12 e), especially to its ♀, even the freshest ♂♂ being considerably less dark than *argyridia* ♂. Forewing with less pronounced lobe or prong in the middle of the postmedian white band and with better developed subterminal; hindwing with median band broadened, the white postmedian bands narrow, two macular subterminals indicated. Abyssinia: Adis Abeba.

argyridia. **H. argyridia** *Butl.* (= disparata *Warr.*) (12 e). Described from Mt. Kenya, perhaps its best-known locality, but distributed in the highlands of Kenya Colony, Uganda and the Ruanda district. Moderately variable. For the differentiation of its nearest allies, see *candace* and *sjöstedti*.

sjöstedti. **H. sjöstedti** *Auriv.* (12 e) has the dark parts more deeply coloured than in *argyridia*, the outer prong of the median band much more produced, the white hindwing very feebly marked, with the exception of the narrow but sharply defined dark border. Kilimandjaro, at the same altitudes as *costalis;* also recorded from the district of the Great Craters. — *mionoseista.* **mionoseista** *Prout*, from the Kivu district of Belgian Congo, is slightly less blackish, with stronger slaty gloss, the median band and the white one beyond it not quite so strongly produced, hindwing with the fringes paler, their proximal half chequered with grey opposite the veins. I believe the same race occurs in western Uganda.

meruana. **H. meruana** *Auriv.* only differs from *sjöstedti* in that the median line of the hindwing is entirely wanting and that the median band of the forewing disappears behind the 1st median vein, while the outward prong is perhaps even longer than in *sjöstedti:* possibly a further race of the same species. Mount Meru, the typical series collected at an altitude of 3000—3500 m.

inutilis. **H. inutilis** *Prt.* (12 e). In coloration and pattern, in the strongly arched costal margin of the hindwing and according to Janse in the ♂ genitalia a very definite relative of *Asthenotricha*, but lacking the ♂ hair-tuft on which that genus (? subgenus) was founded. Somewhat variable. Uganda (type locality), Kenya Colony, Tanganyika, Transvaal, Natal and Cape Colony, the southern forms and one from Ruwenzori perhaps on the whole larger, etc., so that at one time I intended to give them a separate name, but I think East Africa supplies transitions.

unipecten. **H. unipecten** *Prt.* (12 e) seems evidently related to *inutilis*, but is curiously distinct in that the ♂ antenna bears very long, slender, curved, uniseriate pectinations, whereas those of all the preceding species and of *Asthenotricha* are merely lamellate, almost simple. Founded on a long series of ♂♂ from Mt. Aberdare, besides some from Mt. Kenya; known also, in both sexes, from some localities in eastern Belgian Congo. The *tamsi.* ♀♀ are on an average larger than the ♂♂, but both sexes are variable. — **tamsi** *subsp. nov.* (12 f) is more weakly marked above and beneath, the cell-dots of the upperside, especially in the ♂♂, minute or even wanting, the conspicuous, once-bent line which in *unipecten* follows the cell-dot of the forewing faint and wavy, the pale band which follows the postmedian of the hindwing clearer, this wing beneath predominantly pale, with the subterminal shades quite faint. São Thomé (W. H. T. Tams), 3 ♂♂ and 5 ♀♀, collected for the British Museum.

32. Genus: **Asthenotricha** *Warr.*

As already indicated, this only differs definitely from some *Hydrelia* (with the costa of the hindwing arched) in having a tuft or brush of hair on the upperside of the costal part of the ♂ hindwing close to the base, extending obliquely outward; the anastomosis of the costal with the subcostal is rather shorter than in

most Larentiids. Warren adds that the 2nd subcostal of the hindwing is not stalked, but this — if not an error of observation — must refer to a rare abnormality, as I find it quite shortly to quite considerably stalked. In 1915 I proposed making *Asthenotricha* a section of *Hydrelia*, but subsequently I decided to conserve it until the relation between the African and the Palaearctic elements had been more thoroughly investigated. All the *Asthenotricha* are African.

A. semidivisa *Warr.* (12 f). Recognizable by the blackish costal tuft of the hindwing, the pale patch around the blackish cell-dot of the forewing and the dark longitudinal streak in front of the 3rd radial of the forewing from the (blunt) angle of the postmedian to the termen. Founded on a ♂ from Kiwalogoma, Uganda; forms which are probably conspecific have been sent from Kavirondo and perhaps (a small ab.?) from Bitje, Ja River, S. Cameroons. We figure a well-marked ♂ from Nabagulo Forest, near Kampala. — **euchroma** *Prout* is a trifle larger (25 mm against scarcely 24), more brightly coloured, the pale stramineous parts of the forewing, excepting the tornal region, irregularly suffused with bright ochreous and reddish, the median area predominantly bright red-purple, the longitudinal streak rather thick, varied with purple and reddish. Mikeno Mountain, N. Kivu. *semidivisa.* *euchroma.*

A. straba *Prt.* (12 f). Very similar to the preceding. Distal margins slightly more crenulate, ground-colour more uniformly suffused with bright ochreous, lines more slender, cell-dot much smaller, placed close to the proximal margin of the white spot, longitudinal streak very slender, hair-tuft of hindwing strong, bright ochreous with very little dark admixture. Kivu (loc. typ.), Mounts Kenya and Aberdare and Angola. *straba.*

A. ansorgei *Warr.* was founded on a worn ♂ from Nandi Country, Uganda, and it is not yet quite certain that it may not have been a form of the preceding (in which case the name *ansorgei* would have priority), although the hair-tuft of the hindwing seems to have been dull yellow, with fuscous tips. I believe, however, that an *Asthenotricha* which is distributed in Kenya Colony and known from Toro (Uganda), Kilimandjaro, and I think Ruwenzori is a more probable claimant; except that the proximal band of the hindwing is a little less excurved in the middle, it seems to agree well with the type. Perhaps intermediate between *semidivisa* and *straba*. *ansorgei.*

A. flavicoma *Warr.* (12 f) is the first of a difficult group of close allies which have not yet been completely disentangled. The general tone of *flavicoma* is perhaps "vinaceous-buff" of Ridgway, with a tinge of "vinaceous-fawn", the hair-tuft of the hindwing "antimony yellow". Markings not very sharp, cell-dots small, beneath weak, 1st postmedian line of forewing well beyond cell-dot, somewhat angled near costa. A dark median spot at hindmargin of forewing is indicated or strong. Uganda (the type from Rau, Nandi Country), Busiro, Entebbe, etc.; also from a few localities in Belgian Congo and S. Cameroons. *flavicoma.*

A. amblycoma *sp. n.* (12 f). Expanse 24—25 mm. Perhaps near *semidivisa*, *straba* and *ansorgei* in the concise band (or double line) of the hindwing and the degree of development of the rather dull hair-tuft; the relatively uniform coloration of the forewing is more as in *flavicoma* and some *pycnoconia*. Apparently somewhat variable, but the smaller size, duller colour (no clean cinnamon or ochraceous tone observable except on the very narrow band which edges the postmedian line), less firm postmedian line and especially the almost simple ♂ antenna and very different hair-tuft separate it readily from the other new Fernando Po *Asthenotricha*, described below. Mr. Tams obtained 3 ♂♂ at Moka, 29 January—3 February 1933. A possible race, in poor condition, occurs at Bitje, S. Cameroons, with perhaps more superficial resemblance to *flavicoma*: 1 ♂, from the Joicey collection. *amblycoma.*

A. pycnoconia (*Prout*, MS.) *Janse* (12 g). Lamellae of the ♂ antenna a little less strong than in *flavicoma* and *anisobapta*, costal lobe of ♂ valve (according to Janse) longer and narrower than in *flavicoma*. Slightly browner than that species, ante- and postmedian lines rather sharply expressed, their colour a characteristic bright hazel, the antemedian rather sinuous, postmedian of forewing with a small outward angle at the 1st radial, of both wings edged distally by a fine, very pale yellow line. Costa of hindwing possibly still more strongly arched than in *flavicoma*, forewing above with grey patch of specialised scaling still more noticeable than in that species. My studies were founded chiefly on material from Uganda and especially the Kikuyu Escarpment, but Janse has described from Woodbush and other localities in the Transvaal, and his form perhaps differs from the East African in having the median area rather narrower, especially in the ♂, the antemedian closer to the cell-spot. Capo Colony also produces this species. *pycnoconia.*

A. lophopterata *Gn.* (12 g). This, the earliest-known *Asthenotricha*, was described by Guenée as an *Acidalia!* Although the original came from Madagascar, its headquarters seem to be on Réunion. Warren, in erecting his *flavicoma*, suggested that it might possibly be identical with *lophopterata*, but the latter is a larger species, more fuscous and more strongly marked, perhaps more similar to *pycnoconia*. Further comparisons are offered under the following form, which I take to be the continental subspecies of *lophopterata*. — **anisobapta** *Prt.* (= flavicoma *Swh.*, *Hmps.*, nec *Warr.*) (12 g). Postmedian line of forewing generally *lophopterata.* *anisobapta.*

more sinuous (appreciably incurved between the radials, dentate outward at 1st radial etc.), costa of hindwing whitened, in the ♂ also a whitish admixture in the distal area of that wing, especially its proximal and apical parts. Kenya Colony, especially the Kikuyu Country; also in Uganda, Kivu, Tanganyika Territory (Kilimandjaro) and perhaps Eritrea. Apart from a slight difference in the ♂ antenna (see above), *pycnoconia* may be distinguished from *anisobapta* by having the subordinate lines of the forewing weak, the postmedian less broken, that of the hindwing not crenulate; cell-spots less large, patch of specialised scaling of forewing very strong and blackish, black scaling in cell of forewing beneath also stronger. *anisobapta* varies a little in the amount of cinnamon in the drab ground-colour and the specialised ♂ scaling behind the median and at the base of its branches may be more greyish or more buff; there is always — most prominently in the ♂♂ — a darkening of the median band of the forewing posteriorly, though in varying degree, a character which is scarcely noticeable in *l. lophopterata*.

malostigma. **A. malostigma** *Prout* (13 a). Cold grey, nearer to the colour of *costalis* than of the preceding group, the cell-spot of the forewing large and white but not (as in the *semidivisa* group) with a dark pupil. Kivu district, at altitudes of 2600 m and upwards.

serraticornis. **A. serraticornis** *Warr.* (= dentatissima *Janse*, nec *Warr.*) (12 g) differs from all the previous *Asthenotricha* in having the ♂ antennal teeth at least as long as the diameter of the shaft, as well as in the bright orange ground-colour. Somewhat variable. I suspect that the form from the Transvaal (Louis Trichardt, Lemana, Politzi), which on account of Swinhoe's erroneous sinking of *serraticornis* got misidentified as "*dentatissima*", is a separable race (perhaps agreeing with that from Nyasa), smaller, less deep orange, the specialised scaling of the hindwing perhaps browner (though less extended and less red than in *dentatissima*), but as I have very little material before me I refrain from giving it a name. Normal *serraticornis* was described from Kenya.

dentatissima. **A. dentatissima** *Warr.* (12 g). Antenna almost as in *serraticornis*, the teeth perhaps scarcely as long. Abdomen generally with stronger white spots. Hindwing with basal costal convexity more extreme, cell less short, costal anastomosing rather less strongly (to little beyond middle of cell), specialised scaling of its upperside red, not blackish, and reaching considerably beyond the cell and also (at least distally) to the median vein. Described from Mpwapwa, Tanganyika Territory, but meets *serraticornis* in Kenya and occurs also in Uganda.

barnsae. **A. barnsae** *sp. n.* (12 g). Antennal teeth of ♂ almost as long as in *serraticornis*. Rather smaller than that species, without dark patch at base of medians of forewing, the yellow hair-pencil of the hindwing small, set on a small patch of black scaling. Lines darker than in *serraticornis*, without any reddish admixture, the first line beyond the cell firm, very straight excepting the angle at the 1st radial of the forewing. Kibati, lava plains beneath Birunga Volcanoes, 5000 feet, March—April 1924 (Mrs. Barns), type; Lumbwa, Kenya (G. W. Jeffery) 1 ♂; both in the British Museum.

psephotaenia. **A. psephotaenia** *sp. n.* (12 g). Expanse 26—29 mm. Antenna as in *serraticornis*. Whitish, strongly irrorated with pale sandy buff, the abdominal irroration more grey. Forewing of ♂ with an extended patch of warmer buff specialised scales behind the median and the base of its 1st branch and entering the cell; cell-dot small but sharp; markings rather blurred and ill-defined, especially in the ♂. Hindwing with costal hair-tuft of ♂ rather large, ochraceous-orange. Underside weakly marked, but with the band-like postdiscal shade on both wings fairly well developed; ♂ forewing with coarse dark scaling in cell (especially posterior part) and along proximal part of the area from 3rd radial to 2nd median. Kivu district, at altitudes of 4000—7000 feet, collected by Mr. and Mrs. Barns, the type from Lowowo Valley, S. Lowa district, W. Kivu. Also from Toro (Uganda) and Ruwenzori, the latter mixed by Hampson with *ansorgei*, of which the ♂ has simpler antenna, lacks the specialised buff scaling of the forewing and has a less bright costal tuft on the hindwing.

fernandi. **A. fernandi** *sp. n.* (13 a). Expanse 26—28 mm. The large, warm-buff to antimony-yellow tuft suggests the *flavicoma* group and the coloration is not dissimilar (e. g. as in the brightest *pycnoconia*); the genitalia, too, resemble those of *flavicoma*, though the process on the valve is longer and more pointed, etc.; the antennal teeth, on the other hand, are at least as long as those of *serraticornis*. Fernando Po: Moka, 29 January—2 February 1933 (W. H. T. Tams), 2 ♂♂ in the British Museum, the paratype not so brightly coloured as the figured type. A ♀, probably conspecific, is more ochraceous-buff, with narrow dark-grey postmedian shade.

tripogonias. **A. tripogonias** *Prout* (12 h). Antenna of the ♂ simple. Remarkably distinct in the development of additional red hairtufts, which form dense suberect masses from the costa of the forewing, overhanging the cell both above and beneath. Réunion, the type ♂ collected on 28 May 1922. 3 ♀♀ which probably belong with it (one taken on the same day, the other two at the end of April), are darker and more uniformly rufous, with black irroration, conspicuous black cell-dots above and beneath, more lines developed, distal area with the veins more strongly light- and dark-dotted than in the ♂.

A. (?) **torata** *Prout* (12 h). Antenna of the ♂ simple. Forewing less broad than in the other species, *torata.*
distal margin waved; an extensive specialised area in anterior part of the cell, coarse suberect tippeddark scales at proximal part of costa, succeeded (on and behind the specialised area) by more floccous hair-tufts. Hindwing with margin subcrenulate, especially behind the middle; no hair-tuft. Madagascar: Station Perinet, 149 km E. of Tananarivo, only the type known. Not strictly congeneric with the rest, perhaps an independent development of *Hydrelia*.

33. Genus: **Chionopora** *Prout.*

Face smooth. Palpus minute, hairy. Tongue wanting. Antenna of ♂ pectinate. Hindtibia with terminal spurs only. Abdomen rather robust. Wings rather narrow. Forewing with distal margin very obliquely curved; cell long, areole double, 2nd radial from before middle of discocellulars, 1st median remote from 3rd radial. Hindwing relatively small; cell over ½, discocellulars oblique, 2nd subcostal moderately to extremely long stalked, 2nd radial central (a continuation of the strong cell-fold).

Erected for a single, very isolated species and referred, on account of the rather strong anastomosis of the costal of the hindwing with the cell, to the *Larentiinae*. Subsequent consideration, however, suggests that it may be one of those unconnected offshoots of the *Sterrhinae* (such as *Anthemoctena*, *Rhodometra*, *Lycaugidia*) which have developed that anastomosis. The long cells, well-developed 1st discocellular of forewing and extreme stalking of the 2nd subcostal of the hindwing favour this latter view, while the wing-pattern is neither normal nor inconceivable for either subfamily. The gnathos is wanting, but this is the case with many *Sterrhinae* as well as with the *Larentiinae*.

C. tarachodes *Prout* (12 h). ♀ unknown. Only worn specimens are accessible to me, but the structure *tarachodes.*
and shape, as well as the irregular, band-like green markings will render the species very easy to recognize. Discovered near Lourenço Marques in January, afterwards taken at St. Lucia Bay in October.

The following addenda should have appeared at the close of the respective subfamilies; for various practical reasons, it is not thought desirable to hold them back any further. A number of the species and forms will be figured on the supplementary plates.

Addenda to the Oenochrominae.

To p. 4, *P e t o v i a :*

niphosphaeras. **P. niphosphaeras** *Prout.* Strikingly distinct in the large white apical patch. Also aberrant in its considerably broader wings, less strongly oblique discocellulars and a few other details, but best referred here. Probably mimetic. Underside quite like upper. Ukami, Tanganyika Territory, only the type ♀ known.

To p. 9, *D i p t y c h i s:*

Janse has erected a new tribe (as Diptychini) for this genus and two or three others *(Zerenopsis Warr., Veniliodes Warr.* and perhaps *Callioratis Feld.)* which — especially the first-named — show manifest affinities with it in the genitalia. No doubt he is essentially right, but as a subfamily revision by the genitalia would involve a far-reaching series of studies, and could not be perfected without co-ordination of other structural groupings, I have not altered materially the Lederer-Meyrick basis.

After *D. g e o m e t r i n a :*

meraca. **D. meraca** *Prout* is unicolorous orange; cell of forewing rather less long than in *geometrina*, distal margin slightly more rounded anteriorly; hindwing with the 2nd radial weaker. Fez, Mozambique, 1 ♀ in the Muséum d'Histoire Naturelle de Genève.

Addenda to the Hemitheinae.

To p. 11, after *P. r h a d a m a r i a :*

rhodozona. **P. rhodozona** *J. Joan.* Only known to me from a photograph and the very full and careful description. Lines of upperside exactly as in *rhadamaria*, of which it may well be a race or aberration, nearest to ab. *rufifascia Prout.* Face above with a black "line" (in *rhadamaria* a moderate or broad band). Wings with a slight brown irroration, which leaves a clean white line (or very narrow band?) outside each line; the band beyond the postmedian macular, not continuous, "testaceous rose". Black subterminal band of underside reaching from costa to 1st median on forewing, on hindwing reduced to slight spots on 2nd subcostal and 1st and 2nd radial, a rather stronger one on 1st median. Mauritius, 1 ♀.

To *P. a b y s s i n i a r i a :*

delotypa. **delotypa** *subsp. nov.* has the black cell-spots and lines, together with the blackish irroration of the subterminal area, much more strongly developed than in the other races, the subterminal line broad. Fernando Po. 3000—4000 feet, June 1926 (T. A. Barns), 2 ♀♀ in the British Museum, expanding 50 and 56 mm, both with more red than green irroration, but this may probably vary, as in other races and allied species.

To *M. c a t a r a c t a e :*

rhusiodocha *Prout* is probably a distinguishable race; greener than the name-type, forewing with the 2nd subcostal stalked (in *cataractae* type connate), both wings with complete, though unequal, series of r e d spots outside the postmedian, underside in the ♂ weakly marked. Kenya: the ♂ type and 2 ♀♀ from Kibwezi, 1 ♀ from Makindu, S. of Nairobi; all are in the Tring Museum. From Tsumebi (S. W. Africa) comes more typical *cataractae*. *rhusiodocha.*

To p. 12, after *X. d y s c h l o r a t a :*

X. roseimargo *Janse*. Janse has separated the Rhodesian (Salisbury) *Xenochroma* from *dyschlorata* and, although he did not know the latter, I find that he is quite correct in this. The forewing in true *dyschlorata* (only definitely known from a Mfongosi ♂ in very poor condition) has the termen appreciably bent at the 3rd radial, while in the present species this is not at all the case (♂) or quite unnoticealy (♀); the hindwing in both sexes of *roseimargo* is shaped as in *planimargo* (2 b), with a slight bend at the 1st radial, while that of *dyschlorata* is more fully convex, with no bend at the 1st radial. The upper lobe of the ♂ valve lacks the "curved claw" which is developed in both *candidata* and *dyschlorata*. The type of *roseimargo* is a weakly marked example, with the irroration and lines grey, the latter weak (on the hindwing scarcely discernible) only the costal margin rosy, the fringes not described (perhaps defective). The species is variable in colour and in the strength of the markings. — ab. **roseilinea** *nov.* (2 b, as *dyschlorata*) has the irroration, strong or moderately strong lines and tips of the fringes much more pink; the line of the hindwing provides a further distinction, in that it always runs straight across the wing, while in *dyschlorata* it is bent about the 1st median. Besides the Salisbury examples I know only a fine ♀ from Zomba. *roseimargo.* *roseilinea.*

X. palimpaïs *Prout*. Considerably smaller and combining nearly the shape of *candidata* with nearly the coloration of *dyschlorata*. Only the type known, a ♀ from Gadau, Northern Nigeria. *palimpaïs.*

After *V. t r i p l a g a :*

V. argopastea *sp. n.* (15 b) has about the size of *sematoperas*, the shape of *triplaga*, the violet-grey borders continuous, only a little constricted in the middle, that of the hindwing narrow; cell-spots, costal border of forewing and abdominal of hindwing, a line though fringe and weak grey lines (one only on hindwing) sprinkled with silvery scales. Tanganyika Territory: Morogoro, 16 January 1910 (S. G. Reuss), type ♀ in Zool. Mus. Berlin. *argopastea.*

V. compsa *Prout*. ♀, 42 mm. Near *immunifica* (2 c). Pectinations rudimentary. Crests rather strongly dark, with some metallic admixture. Wings rather less bluish green than in *immunifica;* cell-marks somewhat enlarged; postmedian dots enlarged, rather strongly accompanied distally with white; terminal line broken into spots or dots, strongest posteriorly; forewing with a large dark spot at tornus, almost reaching the 1st median. Buja, Belgian Congo, only the type known. *compsa.*

V. rhodoblemma *sp. n.* (15 b). Very near *immunifica* and *barlowi;* hindwing with abdominal margin relatively a little longer, concavity between the radials (and tooth at 1st radial) slighter; rosy costa, cell-spots and fringes less mixed with blackish than in *immunifica*, the cell-spots smaller; whitish lines better expressed than in the allies, almost continuous, with no dark dots, the fuscous terminal line slight, but not noticeably interrupted by pale or white dots at the veins. Vertex rosy, mixed with black, as in *immunifica;* abdominal crests blackish fuscous, little mixed with reddish. Zomba (H. Barlow), the unique type (a ♂) in the British Museum. *rhodoblemma.*

To p. 13, after *A. e n g e n e s :*

A. hemistrigata *Mab.* (18 a). I have now seen a specimen and am able to figure it; its affinities are as I assumed. Palpus minute. Tongue vestigial, or possibly wanting. 1st abdominal crest developed. Very like a diminutive *engenes* (which may possibly have to sink), perhaps slightly narrower, apical patches slightly broader, that of the forewing more suffused (except the white proximal border), that of the hindwing with the white proximal patch rather more rotund. Madagascar, the type from Antongil. *hemistrigata.*

To p. 14, after *A. z o n a t a :*

A. (?) **epicydra** *sp. n.* (5 e). Palpus minute. Tongue wanting (?). Face reddish brown; vertex white. Crests large, glossy, with projecting hairs above. Hindtibia with the proximal spurs apparently atrophied. Forewing with the 1st median vein very shortly stalked; pale green, somewhat hyaline, the pattern entirely unlike that of any species heretofore known, the coloration slightly recalling that of *Peratophyga xanthyala* (*Hmps.*, 1896), the crests more as in some South American *Oospila* (Vol. 8, p. 55—59). Underside whitish, the forewing with a blackish subterminal spot between the radials, a smaller one in front of it and a third at hindmargin, as on the upperside; reminiscent of *Hyalochlora* (Vol. 8, p. 50). S. Cameroons: Lolodorf (Konrad S. G. Erich), type a ♂ in Zool. Mus. Berlin. Probably a specialised development of *Archichlora*. *epicydra.*

To p. 16, *Lophorrhachia* Sect. A, add:

aenospila. **L. aenospila** *B.-Bakr.*, described as a *Prasinocyma*, is certainly near *rubricorpus* but sufficiently distinct. Rather less bright green. Abdomen with a rather large blackish blotch dorsally. Face, palpus and wings with the red markings replaced by blackish, those of the wings small; lines brown, with well-marked darker vein-dots; fringes with dark spots opposite the veins. Angola; ? Cameroons.

rhathyma. **L. rhathyma** *sp. n.* 32 mm. Structure as in the two preceding. Abdomen with the white spots nearly as in *rubricorpus* but small, not ringed with red. Face and palpus black-mixed, as in *aenospila*. Lines and fringes also as in *aenospila*, the spots still further reduced, almost obsolete. French Guinea: N'zérékoré, 1900 feet, at light, 29 May—7 June 1926 (C. L. Collenette), type ♂ ex coll. Joicey. Also known from Sierra Leone and Ivory Coast. Perhaps a race of *aenospila*, but the palpus appears a trifle shorter.

Add :

C. Hindtibia of both sexes with 3 spurs. Antenna of ♂ merely shortly ciliate. of ♀ simple.

usiura. **L. usiura** *sp. n.* (5 f). Size of the two preceding. Face red. Palpus in the ♀ very long. Hindtibia of ♂ with terminal spurs very short. Crown of head with a red line between the white anterior and the narrow green posterior part. Forewing with the costal margin more rounded, fuscous, not white; postmedian line incurved between the radials. Hindwing with sharper angle at 3rd radial. Both wings without blotch. Abdomen in the ♀ with smaller blackish blotch than in *aenospila*. Cameroons: Johann Albrechts-Höhe, type-♂ in coll. Brit. Mus.; Namiong, near Lolodorf, on Lokundje River, a ♀ in Zool. Mus. Berlin. Angola: N'dalla Tando, a ♀ in Brit. Mus.

D. ♂ unknown. Hindtibia of ♀ with 2 spurs.

oeorrhoda. **L. oeorrhoda** *sp. n.* ♀, 42 mm. Aberrant in the rather short terminal joint of the palpus, but pretty evidently a link between *Lophorrhachia* and *Adicocrita*. Face apparently blackish (head somewhat damaged). Antenna simple. Abdomen robust, the crests white, bordered with red. Forewing shaped nearly as in *rubricorpus*, 1st subcostal anastomosing with costal and with 2nd subcostal, 1st median widely separate; markings and venation much as in *A. araria* and *A. koranata* (2 g), which I now believe to be a smaller specimen of *araria;* vein-dots more elongate; antemedian fairly distinct, oblique outward from costa to fold, then inward; postmedian incurved at both folds; terminal line red (fringe damaged). Hindwing slightly more elongate costally than in *rubricorpus;* 1st median well separate; cell-dot, postmedian and terminal line as on forewing; a rather large red, strongly black-dusted posterior spot, about 2 mm in diameter, irregularly roundish, not placed, as in *rubricorpus* and others, at abdominal margin but b e t w e e n m e d i a n a n d s u b m e d i a n , followed distally by a smaller and less distinct one near the postmedian. N. of Lake Nyasa: Langenburg, Ukinga, Buanyi-Poroto, high plateau, 25 September 1899 (S. Goetze), type in Mus. Berlin, rubbed but well recognizable.

To p. 19, *H. t u r p i s a r i a :*

claviramis. **claviramis** *f.* (? *sp.*) *nov.* has the pectinations of the ♂ antenna more noticeably clavate, the postmedian line of the forewing somewhat less sinuous, rather near the termen, the forewing beneath largely reddish (posteriorly suffused with dark grey), with strong blackish transverse bands, especially so the postmedian, which is placed like the line of upperside. Fernando Po: Moka, January—February 1933 (W. H. T. Tams), 1 ♂ in the British Museum.

After *H. zapluta:*

mannophora. **H. mannophora** *Prout.* The unique type, a ♂ from Kafakumba, Belgian Congo, expanding 23 mm, has the abdomen broken and is in large part discoloured by moisture, but is strikingly distinct; it has somewhat the appearance of a pectinate, not quite characteristically shaped *Chlorodrepana* but is best placed here; exceptional in shape and in having the 1st median vein of the hindwing well separate. Forewing rather broad, costa strongly arched, apex only minutely produced, termen not appreciably excaved behind the apex, very gently curved from 1st radial, little oblique; dull grey-green, costal edge red to near apex; lines obsolete; some irregular blackish subcostal dots: a white dot in cellule 3 at 2 mm from termen. Hindwing only weakly and not quite regularly convex, anal angle sharp but scarcely produced, abdominal margin not very strongly elongate, 2nd subcostal only very shortly stalked; concolorous with forewing; no markings.

Before *A. s i m p l i c i m a r g o :*

alcaea. **A. alcaea** *Prout* (5 e), only known from a single ♀, is almost certainly referable here, though the palpus and antenna are short, the latter in its distal part with strongly serrate teeth or rudimentary pectinations. Readily known by its large size, its shape and unmarked wings, only with the red terminal line and fringes

and costal edge of forewing. South Central Angola. I have seen also a second *Antharmostes* ♀ with slightly pectinate antenna, but as I cannot otherwise distinguish it from that of *interalbicans*, the time is not ripe for dealing with it and we must await a knowledge of its ♂.

To p. 20, *G e l a s m a* , add:

G. vagistriga *sp. n.* Face green, narrowly white below. Palpus scarcely reaching beyond face, rough- *vagistriga.*
scaled. Vertex and base of antenna white; pectinations moderate. Hindtibia scarcely dilated. Wings broad, rather thinly scaled, their grey-green colour scarcely brighter than pea-green; costal edge of forewing light brown, with a few dark scales; cell-marks and a narrow, sinuous postmedian stripe indistinctly darker green, on the forewing also indications of an irregular antemedian; terminal line blackish, extremely fine and interrupted, a little thickened in the tail of the hindwing; fringes white proximally, grey distally. Underside whitish green, unmarked. Cameroons: Banso Mountains, 6000 feet, August 1922 (G. L. Bates), type ♂ in coll. Prout. The first true *Gelasma* known from Africa.

To p. 22, after *P. v e r m i c u l a r i a :*

P. permitis *Prout.* Expanse 29—30 mm. Very like a small *neavei*, but with the green part of the face *permitis.*
mixed with white, the 3rd joint of the palpus (especially in the ♂) not quite so long, the forewing with the costal edge less pure white, more tinged with buff, the hindwing with the termen still less bent at the 3rd radial, its cell-dot not appreciably produced outward; 1st median of hindwing sometimes just stalked. Kilimandjaro (loc. typ.) and Nairobi.

To p. 25, after *P. t r i f i l i f i m b r i a :*

P. leucophracta *Prout*, founded on a ♀ from Wambogo, Kikuyu Country, differs from *trifilifimbria* *leucophracta.*
in its considerably longer palpus (with the 3rd joint alone almost as long as the diameter of the eye), sharper angle at the 3rd radial of the hindwing, less bluish tinge, reduced cell-spots (on the hindwing wanting) and by the fringes, which are white almost to their base and only weakly grisescent at the tips. Antenna, in addition to minute ciliation, with single bristles almost as long as the diameter of the shaft. Similar forms are known from Unyoro and Nandi Country.

To p. 27, before *M. m e l a n o p i s :*

M. impotens *Prout.* Anomalous in that the ♂ antenna is pectinate (though very shortly) and in some *impotens.*
other details, but apparently best placed here. Hindtibia strongly dilated, the terminal spurs short, tarsus very short. Face orange-red. The rather broad hindwing, whitish green colour, etc., distinguish it from the other species. N. E. Madagascar. Frenulum conspicuous (dark-coloured).

To p. 30, after *C. a r t i c u l i c o r n i s :*

C. ruficristata *Prout*, registered as "ab. (?)" under *articulicornis*, is a good species. Janse differentiates *ruficristata.*
it, in addition to the reddish crests, by the more bluish green colour, the broader postmedian, not accompanied by a darker green shade, and the less green underside. The ♂ genitalia, though similar, show several well-marked distinctions. Pretoria (type) and Durban.

To p. 31, after *N. r h o d o m a d i a :*

N. aphthona *Prout.* Expanse 26 mm. Very near *rhodomadia*, possibly a subspecies. Forewing with *aphthona.*
costa more broadly white; fine white lines well developed, the antemedian straight, the postmedian unusually proximally placed; terminal blotches enlarged, a very small additional one present between 5th subcostal and 1st radial, the tornal one variegated, with a green centre. Hindwing with corresponding distinctions, the single line scarcely beyond the middle of the wing. Kalongo, Uganda, 1 ♂.

To *C. d i d i t a :*

A synonym is *chloë Th.-Mieg*, erroneously described as *Heterocrachis.* I have seen the type of *chloë* and can find no difference. Delagoa Bay is therefore to be added to its known range.

To p. 32, for *H. s i m p l i c i s s i m a :*

H. bilobata *Janse* (3 k, as simplicissima). This has been described as a new *Omphax*, in which case it *bilobata.*
would be the only *Omphax* with pectinate ♀ antenna. My *simplicissima* was described many years ago from a ♀ in Prof. Janse's collection which has apparently not subsequently been matched; I gather from his communications that I have since misidentified it. Probably my type had more green on the vertex and less minute palpus, but I can indicate no other distinctions.

To p. 33, after *H e t e r o r a c h i s f u s c o t e r m i n a t a :*

platti. **H. platti** *Janse* is near *fuscoterminata*, but has the hindwing slightly concave between the radials, is rather broad-winged, much brighter than that species, including its stronger terminal line and more sharply chequered fringes: costal edge of forewing brown (in *fuscoterminata* whitish); vertex in front and shaft of antenna cream-colour, not red-brown as in *despoliata*. Only known from a Durban ♂, bred by Mr. E. E. Platt from larvae found on Canthium obovatum.

After *l u n a t i m a r g o :*

conradti. **H. conradti** *sp. n.* Expanse 21 mm. Similar in shape to *lunatimargo* (4 b), but rather narrower-winged and much smaller. Palpus more minute (about as in *idmon*), tongue relatively strong. Antennal pectinations 2 to 3 times diameter of shaft. Hindtibia, as in *lunatimargo*, with strong hair-pencil. Further agrees with that species in that the 1st subcostal of the forewing is stalked with the others, anastomosing with the costal (in the type also with the 2nd subcostal); 1st median connate (type) or very shortly stalked (paratype). Hindwing with 1st median stalked. Coloration as in the two species named, the brown, dark-sprinkled borders separated from the ground-colour by a crenulate dark line; breadth of border on forewing anteriorly 2 mm, between 3rd radial and 1st median 1 mm, posteriorly widening to 2,5 mm; on hindwing similar, but with the larger expansion apical. N. Cameroons: Johann-Albrechts-Höhe (L. Conradt), type in Brit. Mus., paratype in Zool. Mus. Berlin. A ♀ from Cameroons, Bang Manenguba dist., 700 m, August 1910 (S. G. Schäfer, Mus. Berl.), agreeing in structure, is rather larger, slightly broader-winged, the borders less broad; antenna simple, a further indication that — like *lunatimargo* — this is not a true *Heterorachis*.

To p. 34, after *C e l i d o m p h a x r u b r i m a c u l a t a :*

quadriplaga. **C. quadriplaga** *Janse* is intermediate between *rubrimaculata* (4 b) and *analiplaga* in that the terminal maculation is reduced, but not so completely as in *analiplaga*. Forewing with a vinaceous-fawn, proximally somewhat black-mixed spot at tornus (its diameter scarcely 2 mm) and a very small and ill-developed cell-spot. Hindwing with the spot at tornus considerably smaller still and with a small streak on middle third of abdominal margin. Founded on a single ♂ from Umkomaas, Natal, measuring 38 mm. The genitalia show some appreciable differences when compared with *rubrimaculata:* socii larger and stouter; sacculus more rounded and provided with more teeth. Otherwise I should have supposed it an extreme aberration of *rubrimaculata*, as I have an intermediate ♂ from Durban.

analiplaga. **C. analiplaga** *Warr.* (18 a). The type, which we shall figure, is a ♀ from Massasi, Tanganyika Territory, with the oblique red-brown blotch at the anal angle of the forewing reaching the 2nd median vein and a few red *aplaga.* scales on the fold near the angle representing a corresponding spot on the hindwing. — ab. **aplaga** *nov.* (= analiplaga *Janse*) is the form with these anal spots entirely wanting. I have chosen as its type a second example from Massasi. Janse implies that this is the only form known from Sawmills, S. Rhodesia; from Shamva, however, I have the name-typical form.

After *O. v i c i n i t a r i a :*

trilobata. **O. trilobata** *Janse.* Expanse 29 mm. Similar to *vicinitaria*, as provisionally determined, but with narrower wings, both the distal margins straighter, pectinations (outer series) less short, the longest exceeding twice the diameter of the shaft (in *vicinitaria* 1) and with different genitalia. Both species are described as deep glaucous green and virtually without markings, but *trilobata* shows indications of dark cell-spots. Durban, a ♂ bred from *Tragia durbanensis*.

After *O. n i g r i c o r n i s :*

particeps. **O. particeps** *Prout.* Like *rubriceps* (4 c), but with the crown and antennal shaft white, the whitish abdomen without a trace of cinnamon or reddish crests, termen without the dark dots which are often developed in *rubriceps;* fringe white, at base slightly encroached upon by the green colour, in distal half flushed with pinkish. Belgian Congo (type) and N. Nigeria. Distinguished from *leucocraspeda* by its more robust build, more strigulated wings, pink-tipped fringes and shorter, stouter pectinations.

To p. 35, *P. c a l l i s t a :*

deuterurga. **deuterurga** *Prout*, which was published as a separate species, is shown by Janse's studies of the genitalia to be merely an aberration of *callista* (4 c), perhaps even a synonym if the apparent differences are due to the condition of the individual examples.

To p. 41, *Syncollesis:*

S. tiviae *Prout.* Expanse 26 mm. Antennal pectinations of the ♂ rudimentary (shorter than diameter of shaft). Forewing anteriorly more rounded than in *idia* (4 l, as *bellista*), postmedian line less whitish, not appreciably dark-edged proximally (therefore less distinct), curved, approximately parallel with termen. Recently described on a ♂ from Ndola, N. Rhodesia; a second example subsequently sent from Elisabethville. Should be placed next to *idia*, but the antenna and wing-shape show that it is not merely a subspecies. *tiviae.*

To p. 43, *Hemistola:*

H. semialbida *Prout* (2 g, as semialbata), accidentally omitted from our text, is well recognizable from our figure, though the apex of the forewing is shown somewhat too acute. Expanse 37—40 mm. From *tricolorifrons*, the only other known African *Hemistola* which equals (or surpasses) it in size, it is very different in its less broad wings, opaque scaling, absence of strigulation, white hindwing, etc. Only ♀♀ yet known. Cape Colony: Griqualand East (the type) and Port Elizabeth; Orange Free State: Sepani. *semialbida.*

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5. Subfamily: **Geometrinae.**

This immense subfamily, embracing almost all the Geometridae in which the 2nd radial of the hindwing is wanting or obsolescent, is moderately well represented in Africa, although — as has been mentioned in our Introduction, p. 1 — a number of the most characteristic groups of the other regions, including all the exceptionally large forms, not to mention the *Ourapteryx* of the Palaearctic and Indo-Malayan fauna and many others, are entirely wanting. Very characteristic is the dominance here of the nearly cosmopolitan genus *Semiothisa*, which in Africa is not only very strong in species but also in the abundance of several individual species, and of the beautiful *Zamarada*, elsewhere represented only by a few Indo-Malayan species. Some indigenous developments will also arrest attention, as for instance the robust and singularly shaped *Thenopa* group, the relatively large, slenderly built *Melinoëssa* and — especially in South Africa — a group typified by the genus *Drepanogynis Guen.*, with a special venational development in the ♂. The general affinities are with the Indo-Australian fauna, as evidenced by the *Neocleora* section of *Cleora*, by *Luxiaria*, *Lomographa* section *Heterostegane*, *Hyposidra* (sens. lat.) and numerous other elements. The *Psilocerea* group seems to bear more resemblance to some Neotropical genera, but the phylogeny is not yet sufficiently understood to allow of dogmatism. *Syrrhodia* (sens. lat.), which includes one or two African "pests", is common also in South America and the Indo-Australian Region.

1. Genus: **Illa** *Warr.*

Tongue present. Head, palpus (except the 3rd joint), thorax and femory shaggy-haired. Antenna of ♂ unilamellate. Hindtibia with hair-pencil; all spurs present. Forewing with cell rather long, a ridge at cell-fold beneath, from which a fringe of hairs overhangs the median vein; costal free, 2nd subcostal from cell, anastomosing with 2nd and with stalk of 3rd—4th. Hindwing with costal approximated to subcostal for some distance before middle of cell, 2nd subcostal not stalked. Unknown to me, but I have adapted the characters from Janse. Only the type species known.

I. nefanda *Warr.* (12 h). Very robust, recalling a Noctuid or Notodontid. Probably related to *Mauna* Section B, but differing in the subcostal venation of the forewing. Cape Town, only two specimens known, both ♂; the type was bred, but unfortunately no information is published regarding the larva. *nefanda.*

2. Genus: **Mauna** *Walk.*

Most characters as given under *Illa*. Vestiture probably somewhat less shaggy. Face somewhat protuberant. Forewing beneath with the long hair (when developed) more longitudinal, covering the cell; 2nd subcostal generally anastomosing or connected with 3rd—4th, but quite free from the 1st. The typical section shows further distinctions, but section B comes nearer to *Illa*.

A. Antenna of ♂ pectinate to near apex, with short branches. Wings narrow.

filia. **M. filia** *Cram.* (= acuminata *Walk.* (12 h). Variable, but easily recognized by its shape and structure. *scelestaria.* The usual ♀ form (Cramer's type) is brown, more or less reddish. — ab. **scelestaria** *Feld.* is a form with the *hemixantharia.* forewing grey; fairly constant in the ♂, rare in the ♀. — ab. **hemixantharia** *Feld.* (13 a) is a more striking aberration, founded on a ♀ from Knysna, the forewing bright yellow. I believe the ♀♀ of this species are generally more brightly coloured than the ♂♂, but little material is yet available. *filia* seems to be confined to Cape Colony.

ava. **M. ava** *sp. n.* (13 a). Much larger than *filia* (40—43 mm), but evidently very nearly related, so that it might easily be considered a subspecies but for considerable difference in the aedoeagus. Antenna of the ♀ somewhat more strongly serrate. Forewing with termen (excepting the minutely produced apex) curved (in *filia* almost straight). Hindwing lacking the dark border, but with a rather conspicuous cell-dot above as well as beneath (in *filia* as a rule only noticeable beneath). The ♂ forewing is coloured as in the same sex of *filia*, the ♀ — so far as yet known — also grey, though more strongly marked, with redder fringes and sometimes *punctillata.* with some reddish suffusion on the wing. Johannesburg, 3 ♂♂ and 2 ♀♀ in the British Museum. — **punctillata** *nov.* is a race, or possibly a third species of the group, with the tornus of both wings slightly more rounded the tone more brownish, the hindwing only whitish in costal region proximally, the cell-marks stronger, that of the forewing almost annular, the lines punctuated on the veins, the hindwing above with some vague markings adjoining the cell-spot, beneath with a postmedian line of vein-dots. Cape Town (H. Roberts), 1 ♂, in the British Museum.

B. Antenna of ♂ not pectinate. Wings less narrow.

perquisita. **M. perquisita** *Prout* (12 i). Antenna of the ♂ somewhat thickened, of the ♀ simple. Cell of forewing beneath clothed as in section A. Nearly as large as *ava*, more richly coloured, generally more variegated, hindwing with a dark border, less broad and less blackish than that of *filia;* underside whitish, with suffusion (gener- *reprobata.* ally more vinaceous) in the terminal area of both wings. Southern Rhodesia. — **reprobata** *subsp.* (? *sp.*) *nov.* (13 a) is much more unicolorous, the hindwing without differentiated dark border, the underside with the vinaceous suffusion throughout. Johannesburg, March 1906 (A. T. Cooke), type ♀ in the British Museum. A much smaller ♀ (33 mm) with the same data (Janse collection) has more russet in its tone, somewhat dulled with grey, the hindwing notably so (almost darker than in the following species), the underside also less vinaceous. In the absence of the ♂, the union of *reprobata* with *perquisita* is uncertain; further distinctions which may be significant are the reduced cell-spot of *reprobata*, presence of a (slight) postmedian line on its hindwing and more curved costal end of the postmedian of the forewing.

pictifimbria. **M. pictifimbria** *sp. n.* (13 b). Palpus with 3rd joint rather longer than in most *Mauna*. Otherwise very similar to the small form of *reprobata* last mentioned. Forewing slightly broader, with distal margin less gibbous in the middle, less produced at apex; paler, the costal margin nearly cinnamon-buff, the rest more cinnamon, slightly suffused in places with very pale grey; cell-spot little darkened, oval; fringe rather dark grey in proximal half, then redder than the ground-colour, at the tips mixed with white. Hindwing inclining to vinaceous-drab; postmedian indicated by two dark, nearly confluent dots on the bases of 3rd radial and 1st median, rather suggesting a misplaced cell-dot; fringe with a pale (anteriorly almost white) line at base. Underside much paler than that of *reprobata*, in part whitish, recalling that of *Pareclipsis anophthalma* but with cell-mark developed on hindwing only. Katberg, E. Cape Province, 4000 feet, October 1932 (R. E. Turner), 1 ♀ in the British Museum.

ardescens. **M. ardescens** *Prout* (12 i). This and the rest of the "*Mauna*" will possibly require generic separation, as the forewing lacks the hairy clothing beneath and shows some deviations in the venation, while the genitalia are not altogether congruous. Antenna of the ♂ shortly serrate. *ardescens* is recognizable by its yellow hindwing. Forewing with 2nd subcostal connected by a short bar with stalk of 3rd—4th; the lines sometimes almost obsolete. Pondoland to the Transvaal (loc. typ.).

diasporas. **M. diasporas** *Prout* (12 i as "*diasporos*"). Antennae of the unique type unfortunately lost, but although the shape recalls *perquisita* I suspect the affinities are with *ardescens;* forewing much darker and browner. Underside of hindwing with a curved grey line 3,5 mm from termen, strongest anteriorly, especially on the veins, of forewing with postmedian line from costa to 1st radial — altogether recalling an *Aspilatopsis* underside. Uganda: Nyimabitaba, Ruwenzori, at 8500 feet.

electa. **M. electa** *Prout* (12 i). Smaller than *ardescens* (13 i), ♂ antenna still simpler, termen of forewing slightly more convex, bar between subcostals 2 and 3 sometimes lost; colour redder, more approaching that of some *filia*. Founded on 2 ♂♂ from Mt. Mlanje (Nyasa); occurs also in S. Rhodesia (a ♂ from the Victoria Falls, with hindwing less coloured than in the type) and at Ukamba, Kuila River, S. W. Congo (a ♀ with hindwing broader-bordered, but less sharply, than in the original ♂♂).

M. sematurga *sp. n.* (12 i). Very distinct; the gibbous-margined forewing, with reddish, anteriorly darkened fringe, superficially recalls some Australian *Oenochrominae*. Structure about as in *electa*, venation of *ardescens*. The more heavily marked forewing and especially its complex cell-mark are quite characteristic. Forewing beneath much paler, excepting the extreme costal edge and the fringe; markings faint, except the costal end of the postmedian (about as far as to 1st radial). Hindwing beneath with a curved row of indistinct postmedian vein-dots, which fade away behind the 3rd radial. S. Rhodesia: Betsa, 13 April 1918, a good ♂ submitted by the Rhodesia Museum for determination. *sematurga.*

3. Genus: **Acrasia** *Feld.*

A specialised offshoot of *Mauna*, scarcely differing except in the absence of the long hair of the forewing beneath and in a few ♂ characters. Hindtibia in that sex without hair-pencil; hindwing curiously contorted, the costal region somewhat swollen, this and the middle of the wing above densely clothed with hair, a large part of the abdominal margin folded over beneath, the greater part of this fold clothed with specialised, suberect scaling. Only one species known.

A. crinita *Feld.* (13 b). ♂ unmistakable, on account of the structural characters; ♀ much more like that of *Mauna filia*. Knysna. For many years, the type ♂ was the only specimen known, but recently the Transvaal Museum obtained a pair from Hackerville, Cape Province. *crinita.*

4. Genus: **Microligia** *Warr.*

Less robust than *Mauna*, with which it agrees in the narrow forewing, long cells and several other characters. Face with strong projecting cone. Antenna of the ♂ with short pectinations; hindtibia not dilated. Forewing with 2nd subcostal anastomosing with 3rd—4th. Consists of a few small, pale-coloured species, almost exclusively South African.

M. dolosa *Warr.* (14 a), the type of the genus, is variable on the forewing, but easy to recognize by its shape, generally also by the strong oblique grey mark from apex and also a few (more longitudinal) proximally. Palpus moderate. Cape of Good Hope (the type locality) to the Transvaal, often common. — **oriotes** *Prout*, founded on a single ♀ from near Bismarckhügel (Kilimandjaro, 2700—2800 m), is suffused with mouse-grey instead of white, though the hindwing remains paler than the forewing. Expanse 28 mm (size of an exceptionally large *dolosa*). *dolosa.* *oriotes.*

M. luteitincta *Prout* is considerably larger (32—36 mm), the palpus longer, the forewing slightly less narrow, pale yellow, with no markings except the oblique apical line, which is longer, but slenderer and less dark, than the corresponding mark in *dolosa*. Natal to S. Rhodesia; the originals were believed to come from Cape Colony, but this requires confirmation. *luteitincta.*

M. intervenata *Prout* (14 a). Intermediate in size between the two preceding; the forewing white, as in *dolosa* (and at least as narrow), but with longitudinal drab streaks between the veins. Face brown, white below (in *dolosa* wholly white). Smithfield, Orange Free State, only the type known. *intervenata.*

5. Genus: **Argyrophora** *Guen.*

Agrees in almost all characters with *Microligia*, but the face is smoother, only with a small tuft below, the ♂ forewing according to Janse, has a slight fovea and there are some differences — though somewhat inconstant — in the venation: the 3rd radial and 1st median of the hindwing are generally stalked (sometimes quite strongly) or are at the least connate; the anastomosis of the 2nd subcostal of the forewing with the 3rd to 4th is slight, often a mere touch or (according to Janse) a close approximation without contact. Type species: *trofonia Cram.*

A. trofonia *Cram.* (= histrionalis *Westw.*, trofoniata *Guen.*, monetata *Guen.*) (14 a). Forewing above glossy ochreous-brown, with an intricate pattern of white markings; beneath paler and duller, much more weakly marked. Cape (the type locality and perhaps its chief habitat) to Transvaal. Generally not very variable. *trofonia.*

A. arcualis *Westw.* (13 b) is, according to the only two specimens known to me, somewhat darker, the dark border of the hindwing decided, though narrow. In any case distinct from *trofonia* in the appreciably shorter pectinations, different arrangement of the markings, and lack of white costal edge. "Cape" apparently rare; Mr. R. E. Turner took a ♂ at Milverton, Cape Town in Januar 1926, a second at Mossel Bay in August 1932. *arcualis.*

6. Genus: **Pseudomaenas** *Prout*

The first of a group of nearly related, characteristically African genera, to which reference has already made in the note at the commencement of the *Geometrinae*, where in the ♂ always, the ♀ scarcely ever, has

lost a subcostal vein of the forewing, not — as is so general in the subfamily — through the coincidence of the 4th with the 2nd but through the coincidence of the 4th with the 3rd or the 5th. The antenna is always bipectinate in the ♂, often also in the ♀, the hindtibia never dilated, all the spurs present, the cell of the forewing long, but in varying degree, the 1st and 2nd subcostal long-stalked in both sexes, the 2nd nearly always anastomosing with the 3rd. The genera are not very sharply defined; Janse separates *Pseudomaenas* from his great genus *Drepanogynis* (see below) by the palpi — 3rd joint "small, drooping, naked" in the former, "porrect, hidden in scales, which cover this joint rather loosely" in the latter; but the palpi in the latter show a good deal of variation. The 8 species which have been provisionally grouped as *Pseudomaenas*, probably on account of the glossy wings, with rather narrow, very sharply marked forewing (sometimes recalling the two preceding genera) and ampler, unmarked (or almost unmarked) hindwing, further agree in having the vestiture less hairy than in many of the allies, ♀ antenna not pectinate, 4th subcostal in the ♂ coincident with the 5th, costal of hindwing closely approximated to cell for a long distance. *Agrammodes Warr.*, first proposed for it, was preoccupied.

leucograpta. **Ps. leucograpta** *Warr.* Only the type ♀ known and I have not seen it. Expanse 30 mm. Both wings rather narrow, forewing pale brown, with longitudinal, finely blackish-edged white bands, one (behind the cell) straight from base to near termen, then sharply bent and running to apex, another (shorter and slenderer) about the radial fold, from approximately 1/4 to 3/4 the wing-length. Hindwing very pale buff. Montague Baths, Cape Colony.

alcidata. **Ps. alcidata** *Feld.* (14 a) has a larger number of white streaks, none of them bent. The ♀ (exceptionally to the general rule) shares the ♂ venation. Cape Colony (loc. typ.) and Natal.

margarita. **Ps. margarita** *Warr.* The pure white longitudinal markings of the forewing so broadened that it is simplest to regard this as the ground-colour; there remain 3 sepia-brown streaks; a broad one from base nearly to apex, bent somewhat like the white one of *leucograpta*, but more bluntly; a slender one in front of it, parallel with costa; and a slender one close to termen and distal half of hindmargin, therefore bent like the tornus. Founded on 2 ♀♀ from Smithfield, Orange Free State, which I have not seen.

eumetrorrhabda. **Ps. eumetrorrhabda** *sp. n.* (14 a). White, the face and palpus sprinkled with brown, the thorax largely brown above, including the tegulae except their outer edge. Palpus strong, its length almost twice the diameter of the eye. Wings more elongate than in *margarita*, perhaps not quite so narrow as in *leucograpta;* forewing intermediate between the two, the alternating white and brown bands approximately equal in width. Hindwing clean white, the brown terminal line slenderer beneath than above. Kookfontein, Cape Colony, 3—6 March 1912 (S. Viljoen), type ♀ in the Transvaal Museum.

turneri. **Ps. turneri** *sp. n.* (13 b). Coloration nearly as in the preceding, the markings transverse, though strongly oblique. Costal and interrupted terminal border lighter than the other markings, the contrast between the straight antemedian band and the strongly double-pronged postmedian very striking and accountable for the shape of the central white spot. Hindwing better marked than in most *Pseudomaenas*. Ceres, Cape Colony, April 1925 (R. E. Turner), 1 ♂ in the British Museum.

intricata. **Ps. intricata** *Walk.* (= maculipennis *Wllgr.*, callistege *Feld.*) (14 a). Very distinct in the brown tone and the broken pattern of paired fuscous and white spots and streaks of the forewing; only the white subterminal line and fuscous terminal marks continuous. Cape Colony.

oncodogramma. **Ps. oncodogramma** *Prout* (14 b). Spots of the forewing larger and less numerous, differently formed. The type ♀ came from Pilgrim's Rest, Transvaal. I know also of ♂♂ from Durban and Rietvlei (Natal), but it remains very scarce.

bivirgata. **Ps. bivirgata** *Feld.* (14 b). Again very distinct, the markings simpler, but the postmedian broad and curiously bent. Cape Colony, the type from Knysna.

anguinata. **Ps. anguinata** *Feld.* (14 b). Very similar to *bivirgata*, the postmedian less extreme, the antemedian quite differently formed, a large cell-dot on forewing. Knysna; if it should prove to be a remarkable aberration of the preceding, I propose to retain the better-known name *bivirgata*, which represents the more normal form; both names were published simultaneously.

tricolor. **Ps. tricolor** *Warr.* (13 b). Antennal pectinations of ♂ very long. A gay species, the only known *Pseudomaenas* with a rosy admixture in the ground-colour. Natal: Weenen (the type), Karkloof and Rietvlei.

7. Genus: **Hebdomophruda** *Warr.*

In its elongate wings, generally with still longer cells, and in its dull, sober coloration a marked contrast to *Pseudomaenas*, yet differing but little in essential structure. Antenna in both sexes pectinate, the branches moderate or rather short in the ♂, quite short in the ♀; Janse distinguishes it from both *Pseudomaenas* and *Drepanogynis* (sens. lat.) by the cessation of the pectination before the apex, of the antenna, but this seems to me to apply to the ♀♀ only. Palpus on an average less elongate than in *Pseudomaenas*. Exclusively South African.

H. curvilinea *Warr.* (14 b), the type of the genus, was founded on 4 ♂♂ from Weenen, Natal, and *curvilinea.* has since been taken in some localities in Cape Colony and the Orange Free State. Costal margin of forewing almost straight, or inclining towards concavity. The simple marking of the forewing and the whiter hindwing distinguish it from the rest of the *Hebdomophruda*.

H. apicata *Warr.* (14 b). Also from Weenen (Warren's type), but, so far as I known, not since ob- *apicata.* tained there; the Tring Museum has also a ♂ from Grahamstown and the British Museum 2 from Miss F. Barrett (probably from Transkei). Forewing more glossy and less irrorated than in *curvilinea*, with an apical dash, the oblique line sharper than that of *curvilinea*, but accompanied by some slender dark shades which make it appear bi- or tripartite.

H. crenilinea *Prout* (14 b). Close to *apicata*, possibly representing it in Orange Free State and Basuto- *crenilinea.* land. Middle segments of abdomen strongly infuscated; oblique markings of forewing waved or crenulate instead of straight, some subordinate markings, both here and on the hindwing, better developed.

H. errans *Prout* (14 c) is smaller, the ♂ pectinations a little shorter and stouter, the postmedian line *errans.* arising from costa, not apex, but more oblique than in the succeeding three species, in which this is also the case. Hindwing well marked. Fraserburg, Cape Colony (type) and Bushmanland.

H. eupitheciata *Warr.* (14 c). There has been some confusion regarding this species, on which was *eupitheciata.* founded an unnecessary genus *Stenoptilotis Warr.*, but it is certainly a *Hebdomophruda*. The one here figured, with its larger cell-dots, ill-defined lines above, rather bright red-brown terminal area (beneath more vinaceous) and somewhat longer pectinations (particularly in the ♀) seems to agree better with the description than does the following. The original, a ♀, came from Smithfield; besides, I known, only a few from Cape Colony (Willowmore, Dunbrody, etc.).

H. diploschema *Prout* (14 c). Very similar to the preceding, but less bright. The slender black lines *diploschema.* of the forewing are interrupted at the fold but connected with one another by equally fine lines before and behind the interruption. Founded on 2 ♀♀ from near Beaufort West, Cape Colony; both sexes have since been obtained at Willowmore by different collectors.

H. sculpta *Janse* (14 c). Hindwing scarcely so narrow as in the two preceding; its postmedian line much *sculpta.* more proximally placed than in *errans*. Forewing with median area a good deal infuscated, differently shaped, the antemedian line acutely angled outward in cell, the postmedian at first (for a longer distance than that of *errans*) nearly parallel with distal margin, then curving to become extremely (though not quite regularly) oblique, the median area in consequence over 3 times as broad at costa as at hindmargin. I only know it from the type locality, Willowmore (Cape Colony), but it is also recorded from Bloemfontain.

8. Genus: **Drepanogynis** *Guen.*

Drepanogynis is the oldest name for the collective group which has already been in part discussed under *Pseudomaenas;* and as some of its elements are in a measure connected by intermediates and the genitalia "show an amazing uniformity, hardly to be expected among species which differ so greatly in general appearance", Janse has proposed to unite almost all except *Pseudomaenas* and *Hebdomophruda* (it is not quite clear why these were not also included) in one comprehensive genus. I prefer for the present to retain the principal "subgenera" as genera and to employ *Drepanogynis* for those in which the head and femora are not or scarcely hairy, the wings fairly broad, the forewing with apex generally acute or produced, the hindwing with the costa not specially long, the costal vein diverging from the cell about its middle, the palpus not long, the missing subcostal vein (as also in the two preceding genera) apparently the 5th. Even so, *Drepanogynis* is sufficiently heterogeneous in shape and pattern, in the details of the antennal structure, etc. In any case *Lissodes Warr.* is an absolute synonym, having the same genotype (*mixtaria Guen.*), and *Apleroneura Warr.* (type *tripartita Warr.*) and *Phrudochorda Warr.* (type *fuscimargo Warr.*) at most a section (or sections) with pectinate ♀ antenna.

A. Antenna in both sexes bipectinate (*Apleroneura*) (see also the last 3 doubtfully placed *Drepanogynis*).

epione. **D. epione** *Prout* (14 c). A small species, with the palpus more tufted than in most *Drepanogynis*, the postmedian line much less straight than in *admiranda;* hindwing with the termen sinuate in the middle; its *fuscomarginata.* cell-mark conspicuous. Underside more coarsely strigulated than upper. — ab. **fuscomarginata** *Janse* has an antemedian band and the entire distal area, especially of the forewing, heavily clouded with fuscous. — *epione* was described from the Transvaal and extends southward to the Cape Province.

fuscimargo. **D. fuscimargo** *Warr.* (14 d) has much the same scheme of markings as the last-named aberration, but they are purplish-fawn on a yellow ground, the underside quite like the upper, and it is a moderately large species, with crenulate margins. Natal (loc. typ.), Zululand and Transvaal.

tripartita. **D. tripartita** *Warr.* (14 c). ♂ only a little duller than *fuscimargo*, ♀ considerably duller; borders in general much less solidly darkened; distal margins rather less strongly crenulate, but the hindwing with a more prominent tooth at the 3rd radial. Underside more strongly irrorated or strigulated. South Rhodesia to Natal, the type from Barberton; also Kalahari.

sata. **D. sata** *sp. n.* (13 b). Palpus rather slender. Vertex and the moderately long antennal pectinations dark grey. Coloration somewhat as in the palest *tripartita;* distal margins somewhat less bent at 3rd radial, that of the forewing strongly curved; hindwing fairly broad. Lines weak and irregular, largely obscured by the profusion of large dots or small spots which, on the greater part of the forewing and posterior part of hindwing are the particular characteristic of the species. Cell-dot of forewing large, of hindwing small; a dark mark from costa near apex of forewing (commencing the postmedian line), another at termen from apex to behind 1st radial. Underside similarly but rather more weakly marked. Tanganyika Territory, not exactly localised, the type ♂ in the British Museum (ex P. Lathy).

admiranda. **D. admiranda** *Warr.* (♀ = soprinataria *Warr.*, nec *Guen.*) (14 d ♂, ♀). Pectinations of the ♀ rather longer than in *fuscimargo* and *tripartita*. Distal margins less irregular than in *tripartita*. The oblique, nearly straight postmedian line becomes on the hindwing almost central. Sexual dimorphism in colour strong, especially on the upperside; beneath, the denser, brighter strigulation and brighter lines of the ♂ bring it nearer to the ♀ coloration. Natal, Zululand and Transvaal; type from Durban.

incogitata. **D. incogitata** *Prout* (14 d). Similar to *admiranda*, including the sexual dimorphism. Smaller, the forewing without the (slight) costal sinuosity, the line of the hindwing much nearer the termen, the coarse irroration of the underside more fuscous, etc. Angola.

B. Antenna in ♀ simple, serrate or very incompletely pectinate (*Drepanogynis*).

mixtaria. **D. mixtaria** *Guen.* (= inapplicata *Walk.*, dulcinaria *Feld.*, strigifera *Warr.*; ♀ = regularia *Guen.*, exemptaria *Walk.*) (14 d ♂♀). Variable, especially sexually, the ♀♀ (in which, moreover, the apex of the forewing is more produced, the teeth of the hindwing a little more pronounced) almost always inclining towards the colour of *admiranda* ♀, while the ♂♂ are in general greyer, but much more variegated. Beneath, as in *admiranda* ♂, the strigulation is strong and bright, but a contrasting grey element in the distal area remains. Fairly common about Cape Town and extending to Namaqualand and to E. Transvaal.

serrifasciaria. **D. serrifasciaria** *H.-Sch.* (14 e). Closely related to *mixtaria*. Generally smaller (32—33 mm); distal margins less dentate. Colour in both sexes, so far as known (2 ♂♂, 4 ♀♀), approaching that of *mixtaria* ♂, but with the yellow shading proximal to the postmedian less developed, the ♀♀ very coarsely irrorated; cell-dots generally stronger, antemedian somewhat straighter (after its anterior angle), postmedian rather more distal, more strongly bicurved, the ♀♀ with extended dark maculation outside it, the ♂ here nearly as in *mixtaria* ♂. Underside with similar distinctions. Cape Colony; the Tring Museum has a larger ♂ (35 mm) from Nieuwveld Mountains, the British Museum a ♀ from Grahamstown. A ♂ and 2 ♀♀, from Miss F. Barrett, probably came from Transkei.

chromatina. **D. chromatina** *Prout* (14 e). Notwithstanding that the hindwing participates in the colouring and pattern of the forewing, as in all the foregoing, the build, the palpus and the type of markings leave little doubt that this is to be associated with the following group. Palpus rather short. The said characters of the hindwing, especially the presence of a strong cell-dot and the completeness of the postmedian line, separate it from the rest of them. Generally, also the colour is a little brighter reddish and the slender yellow line which edges the postmedian more conspicuous. Transvaal, not common. Records from Karkloof were based on misidentification; see *leptodoma* below.

athroöpsegma. **D. athroöpsegma** *Prout* (14 e). This and the two following are intermediate between *chromatina* and the rest of the group in the hindwing conditions, that wing being a little paler (less strongly irrorated) than the forewing, but with the postmedian line usually fairly well developed, especially in *athroöpsegma*. The fuscous strigulation of the forewing on a pale ground and the presence of an interrupted subterminal band on this wing are characteristic of *athroöpsegma*. Build slender; pectinations moderate, slender. Founded on a ♂ from Ceres, Cape Colony.

D. pero *Prout* (14 e). Probably near *athroöpsegma*. Forewing darkened with copious but irregularly disposed red-brown irroration, a conspicuous pale patch remaining between the bases of the 3rd radial and the 2nd median; antemedian line more strongly excurved than in *athroöpsegma*, subterminal band complete, cell-spot obsolete. Clanwilliam, Cape Colony, only the type ♀ known. *pero.*

D. hypoplea *sp. n.* (13 c as "*hypoptea*"). Probably also near *athroöpsegma*, of the same size, similar in structure, but with the 2nd subcostal not touching the 3rd to 4th. Wings perhaps still better rounded, distal margins smooth, irroration strong, more uniform, lines very weak, antemedian less bent, postmedian slightly more curved; cell-dot of forewing less large, of hindwing obsolescent, outer markings obsolete. Deelfontein, 11 March 1902 type ♂ in coll. British Museum, together with a darker ♂ from Masite, Basutoland, 14 December 1901 (R. Crawshay). *hypoplea.*

D. strigulosa *Prout* (14 e). More robust than *athroöpsegma* (14 e), pectinations less slender, forewing more reddish, especially in the densely strigulated median area, the distal area remaining nearly as pale as the hindwing; cell longer. Strigulation olivaceous grey, lines cloudy, cell-dots small. Deelfontein (the type) and Fraserburg (a quite similar ♂). *strigulosa.*

D. devia *Prout* (14 f). This and the four following forms are evidently very closely allied and (the more so because the position and exact shape of the lines are certainly liable to some individual variation) peculiarly difficult to discriminate. Prof. Janse has done some excellent work with them, especially as regards the ♂ genitalia, but we have still much to learn. All have the same simple pattern: cell-dots (often slight on hindwing), 2 lines on forewing (the postmedian, especially anteriorly, often indicated beneath) and an incomplete one on hindwing (generally obsolete beneath), the underside (as also in the species from *chromatina* to *strigulosa*) well irrorated but without the coarse strigulation, colour-contrasts and generally strong markings which characterize our first seven *Drepanogynis*. Of typical *devia* I only know 2 Transvaal ♂♂, the type from Woodbush, the other from Haenertsburg, both of which were in England when Janse was preparing his volume; he gives, as "*devia*", a beautiful photograph of the Karkloof form of *leptodoma* and his description seems clearly to point to that species, and he decides, from a careful study of the genitalia, that both are one species; it is quite possible that he may be right as regards true *devia* also, but we must await a comparison of typical *devia* with the *leptodoma* forms. In both the known *devia*, the 2nd subcostal of the forewing fails to touch the 3rd—4th, though there may be a vestigial connective bar. Further distinctions are noted under *leptodoma*. *devia.*

D. leptodoma *Prout* (14 f). Paler, more slenderly built and more glossy than *devia*, the anastomosis of the 2nd subcostal of the forewing, so far as yet observed, quite normal. Postmedian of forewing, at least in the ♂♂, without the blunt angulation in the middle which is conspicuous in *devia*, that of the hindwing more oblique, reaching the hindmargin nearer to the anal angle. Founded on 2 ♂♂ from Pilgrim's Rest, Transvaal. *leptodoma.*
— **karkloofensis** *subsp. nov.* (14 f) is much more brown or red-brown, similar in colour to *vara* and *glaucichorda*. The ♀♀ which — by the locality and their general effect — I confidently refer here can be confusingly similar to those of *glaucichorda*, having sometimes a more sinuous postmedian on the forewing than the ♂♂, but that of the hindwing seems to remain straighter and more oblique than in the allies, discernible across the wing (though extremely slender), passing near (sometimes close to) the cell-dot. Karkloof, Natal, fairly common, type ♂ in the British Museum; probably some other Natal records belong here. The genitalia differ very little from those of typical *leptodoma*. *karkloofensis.*

D. glaucichorda *Prout* (14 f). At least as robust as *devia*, more reddish, cell-spot of forewing enlarged, postmedian line commonly followed distally by dark-grey spots, an intervening pale thread generally glaucous-grey or whitish. The distal margins are slightly more bent than in most of the group; the postmedian line of the hindwing is more excurved, so that its middle part, when not obsolete, is nearer to the termen than in *leptodoma*. Antenna of ♀ subserrate (as also in *vara* and probably *karkloofensis*). Transvaal, the type from White River; also from Tugela, Zululand and a few localities in Natal; a pair from Katberg (E. Cape Province) larger (35—36 mm) but otherwise identical. *glaucichorda.*

D. metoeca *sp. n.* (13 c). Antenna of the ♀ with the slight serrations transformed (gradually), after a short basal part, into true pectinations — though scarcely longer than diameter of shaft — which continue till ¾ the antennal length. Forewing, as in allied ♀♀, bent at 3rd radial; hindwing elongate costally, not fully rounded terminally. Probably nearest to *glaucichorda* except as to antenna; forewing with more vinaceous-grey admixture, cell-mark rather longer than 2nd discocellular, postmedian line curving close to costa, the pale hindwing and the underside perhaps a little more strongly marked than in *glaucichorda*. S. W. Tanganyika: Marungu Plateau, W. side, 7000 feet. February 1922 (T. A. Barns), 1 ♀ in the British Museum. *metoeca.*

D. vara *Prout* (14 f). Again very similar, but fairly easy to distinguish by the strong central projection of the postmedian and generally (at least in the ♂) distinct apical dash on the forewing. Distal margin of forewing prominent in the middle. Natal: Karkloof and Impetyeni Forest, *vara.*

nigrapex. **D. nigrapex** *Prout* (14 f). Much larger than *vara*, generally darker, the hindwing little paler than the forewing; markings much as in that species, the cell-spot of the forewing rather large, in the ♀ placed at scarcely, or not at all, beyond ½ the wing-length — i. e. the cell here not elongate. In the ♀, moreover, the veins of the forewing are finely ochreous, the lines double, the apical mark sometimes wanting. Waterval Onder, Transvaal; also a more fawn-coloured aberration (hitherto known only from 1 ♂) from Weenen, Natal.

monas. **D. monas** *Prout* (14 g) is also a large and not brightly coloured species, the ♀ still larger than the figured ♂ (reaching 54 mm) and variable. Nearest to *incondita*, face tufted, pectinations of the ♂ not quite so extremely long, of the ♀ virtually simple, forewing with termen rather more gibbous, terminal line wanting, postmedian not crenulate, hindwing with cell-dot obsolete. Grahamstown (type ♂), Durban and Namaqualand. The only known *Drepanogynis* in which postmedian line suggests definite mimicry of the midrib of a leaf.

albiordine. **D. albiordine** *sp. n.* (14 g). Perhaps related to *incondita* (14 g), notwithstanding its much smaller size (32—33 mm), narrower forewing and much less long pectinations. Face without cone. Palpus scarcely longer than head. Wings more resembling those of *Eupagia canilinea* than of any previously known *Drepanogynis*, the pale lines which accompany them white, and developing on the veins pronounced white, more or less triangular spots, with their apices in the median area; lines and antemedian white spot a little thickened at costa of forewing. Underside paler, the hindwing whitish, the cell-spots enlarged, a rather broad dark postmedian, angled on the radial fold of the hindwing. S. W. Africa: Hoffnung, E. of Windhoek, 1850 m, 5 and 9 June 1934 (Dr. K. Jordan), 2 ♂♂.

incondita. **D. incondita** *Warr.* (14 g). Antenna of the ♂ with the pectinations extremely long; of the ♀ serrate, with the teeth so long that they resemble rudimentary pectinations. Palpus of moderate length. Variable
renitens. in colour, etc., but unmistakable. — **renitens** *Warr.*, from Cape Town, is merely an unimportant ♀ aberration with the postmedian line somewhat less distally placed than usual and the entire wing (according to the description) somewhat suffused as far as this line. — The species is commonest in the region of the Cape, but reaches Tsumeb, S. W. Africa.

unilineata. **D. unilineata** *Warr.* is unknown to me. From Janse's photograph I should have taken it to be a large (47 mm) aberration of *incondita* with the postmedian line unusually near the termen; but we learn from the same authority that the genitalia show several differences: uncus much shorter, valve more nearly elliptical, its apex much more roundly pointed, aedoeagus more sharply pointed. Wings pinkish-cinnamon, blotched and irrorated with fuscous, cell-spots indistinct, the postmedian fuscous shade rather near termen, on hindwing indicated by irroration. Cape Town, only the type ♂ known.

arcuifera. **D. arcuifera** *Prout* (14 g) is a somewhat erratic species in its yellow-orange hindwing and in the markings of the forewing. Palpus rather short. ♀ unknown; possibly it will prove to have the antenna pectinate. Natal National Park (the type) and Grahamstown.

subochrea. **D. subochrea** *Prout* (14 g) was unfortunately founded on a single ♀ and the figure has not come out quite successfully. Antenna serrate. The antemedian line does not in reality merge into the median spot at hindmargin and both the lines are accompanied by inconspicuous pale spots, the antemedian proximally, the postmedian distally, and the costal postmedian one may even be called conspicuous. Notwithstanding the ochreous tone of the hindwing and the still more ochreous underside, *subochrea* may be a member of the *devia* group; a ♂ from Willowmore, almost certainly an aberration of it, has the ochreous tinge somewhat more subdued and much resembles a small *hypoplea* (13 c) except in the long cell of the forewing, the said ochreous tinge and the pale costal postmedian mark. A dilapidated ♂ from near Beaufort West (foot of Nieuwveld Mountains) appears to have been quite like the ♀, which came from Smithfield.

cervina. **D.** (?) **cervina** *Warr.* (13 c), referred tentatively by its author to the South American genus *Simopteryx*, was founded on a single poor ♀ in the British Museum (although this is not indicated in the original description). It may perhaps be related to *protactosema*, though smaller, with differently shaped wings and much slighter marking. Antenna of the ♀ simple. In the absence of the ♂ I query the generic position. "Madagascar".

protactosema. **D.** (?) **protactosema** *Prout* (14 h) has been provisionally referred to this genus, although the costally elongate hindwing more recalls those of *Hebdomophruda*. Antenna of the ♂ pectinate to the apex, the branches of moderate length; I suspect it will prove pectinate in the ♀ also, as in the following species. Forewing with apex not produced; 2nd subcostal not anastomosing with the stalk of the 3rd—4th. The build, upperside coloration and dark costal spots recall some Indo-Australian *Hypochrosis*. Underside with only the cell-dots and (sometimes faint) a slender pale postmedian stripe. Madagascar: Station Perinet, E. of Tananarivo.

hypopyrrha. **D.** (?) **hypopyrrha** *Prout* (14 h) seems evidently related to *protactosema* in spite of the differences in shape and the origination of the 2nd radial of the forewing very near the 1st (in *protactosema* more moderately

so). It has not the rough face and hairy femora of *Derrioides*. Antennal pectinations shorter than in *protactosema;* the ♀ antenna is dentate, not pectinate. Underside similar, the forewing more orange-red than above. Madagascar: Station Perinet, near Tananarivo.

D. (?) rubidivenis *Prout* (13 c) was founded on a ♀ and doubtfully referred to *Hemerophila*, but the ♂ has the venation and all the essential structure of *Drepanogynis* and — except in its broader wings — it would really not seem out of place in the neighbourhood of *athroöpsegma* and *hypoplea*, though I assume that they have non-pectinate ♀ antenna, while *rubidivenis* has them distinctly (but shortly) pectinate. Named from the characteristic coppery-red veins. Underside paler, the markings (except the antemedian) expressed, but more weakly than above. Karkloof, Natal. *rubidivenis.*

9. Genus: **Derrioides** *Butl.*

Chiefly different from *Drepanogynis* in the tufted face, more hairy pectus, tegula and femora and in the palpus, which is of moderate length, densely clothed, in the typical species somewhat upturned. Antenna of the ♀ with very short. 2nd radial of the forewing arising well before (often much before) the middle of the discocellulars. Type of the genus: *hypenissa Btlr.*

D. cnephaeogramma *sp. n.* (13 c). More recalls *Drepanogynis strigulosa* than the other *Derrioides*, but is readily distinguishable by the more robust build, more hairy vestiture, more approximated lines and other details. Palpus porrect. (Antennae lost). The copious dark-grey irroration of the forewing is in places united into short strigulae. Cell-dots distinct, though small; lines rather thick, the antemedian indistinct towards costa, the postmedian outbent between base of 2nd median vein and 2nd submedian. Hindwing greyer, with very faint indications of a pale postmedian. Forewing beneath less bright, more weakly marked, hindwing, on the contrary, a little brighter. Cape Town, September 1891, type ♂ in the British Museum. *cnephaeogramma.*

D. hypenissa *Btlr.* (13 c). Vinaceous brown, the forewing with dark cloudings and paler costa. The dark, pale-edged postmedian line continued on the hindwing. Underside more reddish, both wings coloured alike. Antennal shaft white. Natal and Pondoland. *hypenissa.*

D. villaria *Feld.* (14 h). Close to *hypenissa* but larger, relatively longer-winged, the hairy clothing of thorax and femora perhaps a trifle stronger, but certainly not enough to justify the separate generic name *Eulasia Warr.*, which, moreover, is preoccupied. The originals come from Cape Town; the range extends to the Transvaal. Variable in colour, on the whole lighter or less clouded on both wings than *hypenissa*, but with some dark clouding in the tornal region of the hindwing generally more outstanding. *villaria.*

10. Genus: **Aspilatopsis** *Warr.*

Distinguished from the preceding group chiefly by the ♂ venation: 4th subcostal apparently coincident with the 3rd, not with the 5th; that is to say, the last subcostal runs to the distal margin, not to the apex. Face somewhat roughened or with a cone below. Palpus shortish. Antenna in the ♀ always (so far as yet known) definitely pectinate; pectinations in the ♂ often long. Femora not hairy. Hindwing paler than forewing, more or less weakly marked. Perhaps merely a section of *Sicyodes*, generally recognizable by the strong, highly oblique postmedian line, which arises at or close to the apex of the forewing. Genotype: *punctata Warr.*

A. gloriola *Prout* (14 h). Very distinct in the shining yellow-green, finely pink-edged forewing, incomplete, dentate-edged pink stripe and grey hindwing. Palpus rather short. Transvaal (loc. typ.) and Natal. *gloriola.*

A. soni *sp. n.* (14 i). Closely related to *gloriola*. Pink markings on head and thorax less bright, the longitudinal band of the thorax above only expressed by a posterior patch. The glossy forewing predominantly purplish-vinaceous, only behind the 2nd submedian deep olive-buff; the white line broader, continued across the wing; a much weaker inner line, excessively acutely angulated at end of cell. Hindwing darker grey than in *gloriola*, especially beneath. Vredendal, Cape Colony, end of July 1927 (G. van Son), the unique type in the Transvaal Museum. *soni.*

A. nipholibes *sp. n.* (14 h) has the markings of typical *Aspilatopsis* but nearly the strong gloss of the two preceding. Expanse 38—43 mm. Abdomen perhaps more slender than in the genotype. Antennal pectinations long. Variable in colour — light buffy-brown (the type), ochreous, or cinnamon-rufous to hazel — but pretty constant in markings. The slender snow-white lines which accompany both the dark ones and the acute angulation of the antemedian, with a narrow dark shade connecting it with the cell-spot, and usually the widening of the postmedian are its most salient characters. The underside is also glossy and shows on both wings the lines of well-marked *punctata*, but the postmedian is edged with white; cell-dots distinct. Kastrol Nek, S. Africa, January 1925 (G. van Son), 5 ♂♂, the type in the Transvaal Museum. *nipholibes.*

carneata. **A. carneata** *Warr.* (13 d ♂♀) was founded on 2 ♀♀, in poor condition, from the foot of the Nieuwveld Mountains, 5 miles N. W. of Beaufort West, and it is not yet certain that the broader-winged and often larger ♂♂ which have been associated with it are really the same species. In any case both are distinguishable from the rest of the group by their fleshy tone and especially by the position of the postmedian line at the costa. ♀ antenna rather slender, with the pectinations 2 or 3 times the diameter of the shaft. The ♂♂ have been taken in Natal and the Transvaal.

alicata. **A. alicata** *Feld.* (13 d) is only known from the type, a ♂ from Knysna. The palpus is rather short, the pectinations long and slender and the noticeable sinus between the radials of the hindwing suggests that it may be an usually large relative of the *cambogiaria* group (*Sicyodes*). Postmedian line of forewing at costa intermediate between those of *earneata* and *antennaria*.

antennaria. **A. antennaria** *Guen.* (= imbellata *Walk.*, vilisaria *Walk.*) (14 i). The acquisition of Guenée's type (Namaqualand) by the British Museum has enabled a study to be made of its genitalia and established the fact that it is not the common species which has generally been called *antennaria* in this country. The aedoeagus is small, the lateral process of the juxta very short and small, though with a chitinized point at the end. Smaller than most *punctata*, intermediate in colour between that and *rufaria*, the antemedian spots on the folds not developed. Face tufted; antennal pectinations of the ♂ very long. Only known from western Cape Colony.

unilineata. **A. unilineata** *Warr.* (= antennaria *Janse*, nec *Guen.*) (13 d). Moderate-sized or rather large, in the type form light ochreous brownish, with the oblique postmedian line rather slender, the antemedian line with a dot behind the cell, a few weaker dots in a line with it along the fold. Antennal pectinations in both sexes long. ♂ with the processes of the juxta rather long, c u r v i n g. Described from Zomba, similar forms known *hemigrammata.* from Barberton and doubtless elsewhere. — ab. (?) **hemigrammata** *Mab.* was believed to come from the Comoro Islands but I rather doubt it, as it seems to be nothing but a small, weakly marked *unilineata* ♂. Possibly, however, it is an island race awaiting differentiation on better material. In any case the genitalia are identical. *futra.* — ab. **fulva** *nov.* seems to be the commonest form, at least in S. Rhodesia and Natal, brighter golden yellow, the postmedian line commonly thickened, sometimes suggesting a slightly crenulate appearance at its outer edge; generally large; the line of the hindwing generally better traceable above, especially in the ♀. The latter sex usually has the distal area variegated with pinkish, the hindwing also less white than in the ♂. Variable. — *unilineata* is distributed from Southern Rhodesia to Transkei. A few Nyasa specimens will perhaps prove racially separable, clearly conspecific.

johnstonei. **A. johnstonei** *sp. n.* (14 i) can scarcely be a small local form of the preceding. Apart from the small size and more rufous tinge, its forewing shows a more convex distal margin, intermediate towards the shape of *rufaria*, which it also approaches in the rather well developed line of the hindwing. Antemedian of forewing inclined to form 2 spots, as in *punctata*. Genitalia distinguishable by having the processes of the juxta straight (but not shortened as in *punctata*), the cornuti apparently less robust than in *unilineata*. Songea, Tanganyika Territory (R. J. Johnstone), 3 ♂♂; kindly presented to the British Museum by the discoverer. A pair from "Manboia" (probably Mamboia, E. Tanganyika Territory) seems to agree perfectly with them.

punctata. **A. punctata** *Warr.* (14 i). More glossy (less irrorated?) than *unilineata*, otherwise difficult to distinguish superficially in the ♂, although making a somewhat different impression. Antemedian line, at least in the typical form, very definitely forming a dark spot at each fold. Natal (the type from Weenen) and Transvaal; perhaps also Cape Colony and S. Rhodesia. The genitalia leave no doubt as to the distinctness of this species; in particular, the process from the juxta is c o n s i d e r a b l y s h o r t e r , s t r a i g h t and pointed. I have seen no ♀♀ similar to these ♂♂, though I suspect some mottled ones which I formerly *orthobates.* placed among *unilineata* may belong with it. — ♀-form. **orthobates** *Prout* (14 i) seems to be a prevalent, if not the only, form in this sex. Somewhat narrow-winged, especially as regards the hindwing. Forewing of a relatively cold, greyish colour, antemedian line not macular. Fairly frequent from the Transvaal to Cape Colony. As no ♂♂ of this coloration are known to me, it evidently belongs with one of the more brightly coloured ♂♂; probably — both because the type, from Pilgrim's Rest, was collected with a ♂ (extremely worn but in some respects very similar) whose genitalia are demonstrably *punctata* and partly because Janse's investigations have resulted in associating a variable assemblage as "*orthobates*" — the present is its correct location.

simonsi. **A. simonsi** *sp. n.* (14 i). Expanse 34 mm. Much darker than the rest of the *antennaria* group, heavily mixed with blackish brown, superficially recalling *Derrioides hypenissa* (except in the pale, almost unmarked hindwing above), but with the narrower thorax, long pectinations, almost glabrous hindfemur and presence of the 5th (not the 3rd) subcostal vein indicative of typical *Aspilatopsis*. Forewing with termen not quite so strongly convex as in *hypenissa*, postmedian line at costa rather less near apex, from 3rd radial or 1st median rather more suddenly curved inward; the two spots which, as in *punctata*, represent the antemedian large, but not very noticeable in the midst of the rest of the dark clouding. Hindwing only approaching (not quite

reaching) the colour of the forewing at distal margin, the whitish proximal area showing a very small and weak cell-dot. Underside much as in *antennaria*, only with the postmedian line of the forewing arising rather further from the apex. Port Elizabeth, May 1919 (Fritz Simons), type ♂ in the Transvaal Museum.

A. rufaria *Warr.* (13 d). Broader-winged than *antennaria*, distal margins noticeably gibbous. Forewing brighter red-orange, hindwing above more distinctly marked than in most of the preceding, its cell-dot very small but distinct, the postmedian line complete, though not very strong. Angola (type), Nyasa, Transvaal and Natal. *rufaria.*

A. somereni *Prout* (13 e). Distal margins a little more gibbous than in *rufaria*, coloration darker, on account of moderately strong dark-grey irroration; cell-dots slight (on the hindwing not or scarcely discernible), lines slender and not very strong, but the postmedian (even on the hindwing) with noticeable white edge distally. Underside paler (in *rufaria* strongly reddish), with apex conspicuously whitened, postmedian of hindwing less crenulate and sinuate. Kenya Colony, only ♂ known. *somereni.*

A. lacuum *sp. n.* (13 d). The ♂ is very similar to that of *somereni* but larger (39 mm), the type more orange, forewing with cell-spot larger, the dark lines thicker, the antemedian sharply angled in the cell. Both wings beneath somewhat as hindwing above, but with some grey irroration. The ♀ is a little larger (41 mm), much darker, the forewing above being very densely irrorated and strigulated with dark-grey, the irroration also strengthened on hindwing and underside. ♂ pectinations 5 or 6 times, ♀ about 3 times diameter of antennal shaft. Marunga Plateau (S. W. Tanganyika), 7000 feet, February 1922, a pair collected by T. A. Barns. *lacuum.*

A. tenoris *Prout.* ♂, 36 mm. Forewing narrower than in *rufaria*, shaped more as in *antennaria*; the 4th and 5th subcostals fork unusually near the apex; as far as the postmedian line orange-yellow, with some reddish or vinaceous suffusions and some coarse black dots, distal area brownish vinaceous, with some orange suffusion; cell-spot small, antemedian indicated by a black spot in cell and a streak behind; postmedian almost straight, deepest black at its ends, the line which bounds it distally pale brownish vinaceous. Hindwing with the line rather broad, blackish, the cell-dot obsolescent. Kwatebala (Katanga), only the type known. *tenoris.*

11. Genus: **Cophophlebia** *Warr.*

Probably a more specialised development of *Aspilatopsis*, agreeing in most characters with the most stoutly built members of that genus. Palpus moderate. Tongue rudimentary. Antenna, even in the ♀, with long pectinations. Wing-margins irregularly sinuate, the hindwing (especially in the ♀) more or less strongly crenulate.

C. olivata *Warr.* (13 e). The type of the genus. The ♂ is always predominantly green, slightly variable in the amount of the light and dark mottlings, but always retaining the pale shade just outside the postmedian. The ♀ is larger, broad-winged, much more suffused with vinaceous or violaceous shades in the proximal and distal areas. Zomba (the type) and distributed from N. W. Rhodesia through Ruanda and East Africa to Abyssinia. *olivata.*

C. trimeres *sp. n.* (13 e) can scarcely be a remarkable aberration or local modification of *olivata*, but is in any case worthy of a name. The clean light lemon-yellow ground-colour (possibly more greenish when bred), quite without cloudings (only with very fine and sparse irroration) and the extreme darkening of the proximal and most of the distal area, far surpassing the contrasted effect of ♀ *olivata*, are quite characteristic; antemedian line as oblique as in *tullia* ♂. Underside identical with upper. Dungu, Upper Uelle district in September, one ♂ in Tring Museum. *trimeres.*

C. tullia *Fawcett* (13 e) differs in its redbrown colour, more sinuous postmedian of the hindwing and other details. The blackish spot near anal angle of forewing is inconstant in the ♀♀. S. E. Kenya Colony. — ab. **viridescens** *Fawcett* has the same markings, but the median area is green, similar an tone to *olivata*, and this colour also pervades a considerable part of the distal area. The type, from Kedai, is lost, but the British Museum has 2 good ♂♂ from Voi. *tullia.* *viridescens.*

12. Genus: **Sicyodes** *Warr.*

Face generally smoother than in *Aspilatopsis*. Antennal pectinations in the ♀ very short, sometimes wanting. Build on an average slightly less robust, size in general smaller. Wing-shape about as in some of the broad-winged *Aspilatopsis*. Sexual dimorphism, especially in the typical species (*cambogiaria*), strong. Probably, however, as has been already indicated, *Aspilatopsis* will have to be made a mere section, if not a synonym, of *Sicyodes*. Chiefly South African, though reaching Kenya and a part of Belgian Congo.

costipicta. **S. costipicta** *Prout.* Expanse 28 mm. General coloration buff, with some pink suffusions, the palpus mostly red. Forewing with costa almost straight, its edge more strongly spotted with red than in other hitherto known *Sicyodes*, some of the spots longitudinally extended; cell-dot very small and weak; lines as in *cambogiaria* ♂; fringe dark vinaceous proximally, mostly whitish distally. Hindwing almost white, except at anal angle and distal part of abdominal margin; line traceable at posterior end only; fringe behind 2nd median as on forewing, anteriorly white. Belgian Congo: kil. 311 from Kindu, 1 ♂. — **olearis** *subsp. nov.* (13 e) is probably, by the shape and red-dotted costa, a race of *costipicta*, which I cannot now compare. Different in its olive-buff or olive-yellow forewing (quite of the same colour as *olivescens*), incomplete purple-brown proximal line of fringe of the forewing, which from the 1st radial at least to the 1st median is merely represented by spots opposite the veins, less white and better marked hindwing and underside, the postmedian of the hindwing beneath, however, not arising from a strong costal dash. Transvaal: Nelspruit, October-November 1917 (G. H. Breijer), 3 ♂♂; type in the Transvaal Museum. Differs from *olivescens* in its straighter, red-spotted costa, more produced apex, more variegated fringes, postmedian line of forewing beneath more oblique at its costal end, etc. From Janse's description and figure (though the latter would be a somewhat weak-marked example) I gather that this is obviously the "*cambogiaria* ♂" of that author; probably the similarity of the fringes misled him. A much more likely (though not yet proven) ♀ to *olearis* lies before me in 2 examples, one from Moorddrift in October, the other from Pretoria North in December; less green than the ♂♂ (light pinkish buff or more yellowish, only in the median area of the forewing with a tinge of green), costal edge marked as in them, slightly more curved near base, termen with the irregularities of shape intensified and the fringe-markings stronger (compare the sex-dimorphism in *cambogiaria* and others), antenna not pectinate, at most slightly serrate.

algoaria. **S. algoaria** *Feld.* (13 e) can scarcely be, as has hitherto been assumed, a large aberration of *cambogiaria* (*biviaria*). The better developed postmedian costal spots of the forewing, better developed (on the underside dentate) line of the hindwing and especially the spotted fringe of the latter readily distinguish it. Forewing rather more elongate, with costa somewhat more arched proximally; postmedian line somewhat more proximally placed than is usual in *cambogiaria*. — *limettaria.* **limettaria** *Feld.* (13 f), collected with it at Plettenberg Bay, must surely be the ♀ to *algoaria*. It shows similar distinctions from *cambogiaria* ♀ in the more elongate wings, proximally more arched costa, more proximally placed postmedian line and is further distinguishable by the small antemedian spots, the deep inward curve of the fragmentary postmedian at the fold (forming a lunule or — with the aid of some irroration outside it — a larger part of a moon), little indication of the terminal band of typical *cambogiaria*. Fringe-line of forewing incomplete, somewhat as in *olearis*, of hindwing much as in the ♂ (*algoaria*).

coryi. **S. coryi** *Janse* is unknown to me and no structural description is given, excepting a very full one of the ♂ genitalia, which are very similar to those of *Eupagia valida* and *curvifascia;* as, however, its author places it between *biviaria* and *ocellata* in *Sicyodes* and makes no mention of exceptional palpus or venation, I assume that it is rightly placed here. The figure and description in most respects fit *algoaria* remarkably well and it is possible that it will prove a subspecies thereof. The fringe of the forewing, however, is blackish opposite the last subcostal and the 3 radials (in *algoaria* here unicolorous yellow), the wing is sprinkled throughout, though sparsely, with black scales (not discernible in *algoaria*), the red-brown fringe-spots of the hindwing are tipped with black and are not found at the vein-ends behind the 3rd radial (in *algoaria* continued, though somewhat weakened). I find no other significant difference in the whole of Janse's careful and detailed account: and it is right to add that he lays the emphasis on the spotted fringe of the hind wing and that his key only gives "cilia often chequered", etc., so that the essential distinctions from *algoaria* become still slighter. Founded on 3 ♂♂ from Karkloof, Natal.

cambogiaria. **S. cambogiaria** *Guen.* (13 f). Notwithstanding that Janse has done some careful work on the ♂ genitalia of the species of this group which were accessible to him, there still remains much to be accomplished in the differentiation of the species and forms and the adjustment of their synonymy. I feel confident, however (notwithstanding that they have not yet been bred from the egg, nor captured in copula), that the two common forms here associated (*cambogiaria* ♀ and *biviaria* ♂), which occur together in so many places, are the sexes of a single species. The name-typical form, which belongs to the ♀ only (Guenée's type "♂", which I have not seen, and which was said to be like his well-known ♀, must, I suppose, have been in reality another ♀), is variable, but readily recognizable by the (shortly) pectinate antenna, the bright yellow colour, red-brown or purple-brown antemedian spots and extended distal clouding on the forewing, the latter also generally more or less developed on the hindwing. Fringes dark proximally, white (with dark spots opposite the veins) distally. — *tardaria.* ♀-ab. **tardaria** *Walk.*, founded on a very bad specimen from the Cape, is evidently the form (generally small) in which only the forewing is reddish-bordered, this colouring paler (not mixed with fuscous), though sometimes continuing to rather nearer the costa, the antemedian spots scarcely developed, generally replaced by a more extended, but much weaker, pinkish suffusion; postmedian line generally a little less irregular, intermediate towards that of the ♂. Occasional in Cape Colony, the Orange Free State and probably elsewhere. —

♀-ab. (?) **simplicior** *Th.-Mieg*, founded on Guenée's "var. A", from the Cape of Good Hope, is inadequately described: "no violet-brown border, only a feeble and little-prolonged line indicating its position". This reads more like (*algoaria* form) *limettaria* or some other *Sicyodes* ♀. — ♀-ab. **viridescens** *nov.* is like the name-type but with a greenish tone in the ground-colour (nearly as in *warreni*). — ♂-f. **biviaria** *Guen.* (= justaria *Walk.*, inflectaria *Walk.*, biferaria *Walk.*). Typically rather clear yellow, though scarcely so vivid as in *cambogiaria* ♀, the 2 slender, oblique lines of the forewing well developed above, the postmedian also (except its posterior end) beneath, the hindwing with the postmedian line present in the type beneath, often scarcely indicated (or only at hindmargin) above. Fringes concolorous, or only darkened behind 2nd median of hindwing. Guenée's type was from the Cape, *justaria* — which differs very little — from Namaqualand; *inflectaria* and *biferaria*, also from the Cape, were rather small poor specimens, perhaps weakly marked and transitional towards ab. *paucaria*, but need not be separated. A cleaner, white-hindwinged form, with the line of the hindwing almost or altogether wanting, which seems to be prevalent in Natal and eastern Cape Colony, would probably be more worthy of a separate name, but has never received one. Culot (for Oberthür) figured it from a Verulam ♂, but adapted (!) it to Guenée's type by showing too clearly the line in question. — ab. **convexaria** *Walk.*, from "S. Africa" (Cape Colony) is a very large ♂ (34 mm), with the lines widely separated, but otherwise pretty typical. — ♂-ab. **paucaria** *Guen.* (13 f) as *convexaria* is duller-coloured (more olive-tinged), weakly marked the line of the hindwing and that of the underside wanting, or at most shown on the underside by a short costal dash. The type came from Namaqualand; similar examples occur in several parts of Cape Colony. — ♂-ab. **walkeri** *Wllgr.* Unknown to me, but as the careful description repeatedly gives the coloration as "ochraceous" yellow it can scarcely be indentical with *paucaria;* it is differentiated from *convexaria* by the absence of the line beneath; above, the hindwing shows this line on the broadly yellowish posterior part, but not on the anterior, which is white. Transvaal, 1 ♂, expanding "28 mm". — *cambogiaria* is distributed from Cape Colony to the Transvaal and I have seen a rather small ♀ (not the form *tardaria*) from Tsumebi, S. W. Africa.

simplicior. *viridescens.* *biviaria.* *convexaria.* *paucaria.* *walkeri.*

S. gynoloxa *sp. n.* (13 f). Expanse 26—30 mm. Similar in colour to *demissa* (described below), the wings more elongate, tornus of forewing more rounded off. The palpus and the ♂ pectinations appear slightly longer; ♀ pectinations very short, little longer than diameter of shaft. Forewing with minute but black cell-dot; antemedian (when discernible) very oblique from radial fold near cell-dot to about 1/3 hindmargin, in ♀ represented by a reddish spot at fold; postmedian very oblique from near apex to hindmargin at about 3/5, in the ♂ very faintly bicurved (outwardly in anterior half, inwardly in posterior), in the ♀ obsolescent in front of 1st radial, followed by a weak reddish suffusion in distal area; fringe proximally scarcely different from the ground-colour in the ♂, redder in the ♀, in both sexes with (darker) red spots at vein-ends, distally white. Hindwing without markings, proximally and anteriorly paler than forewing; fringe concolorous. Underside almost without markings or (in the type ♂) with an incomplete, curved postmedian line, reaching costa (though here very slender) at least 2 mm from apex and preceded in and before cell by some vinaceous flush. S. W. Africa: Hoffnung, E. of Windhoek, 1850 m, two pairs, including the type; Bellerode, 27 km E. of Windhoek, 1800 m, one pair; all collected by Dr. K. Jordan in October 1933, some unfortunately worn. *gynoloxa.*

S. olivescens *Warr.* (13 f). ♂ distinguishable from that of *cambogiaria* by its olive-lake or citrine colour (occasionally greyer or fleshy), slightly more convex distal margin, whitish edging to the lines, etc.; from *olearis* by the characters there indicated. The name-typical race is distributed in the Transvaal and somewhat variable in size and colour and in the exact course of the lines. Its (probable) ♀ is similar to that mentioned under *olearis*, but with the antenna (shortly) pectinate. — **demissa** *subsp. nov.* Size of the smallest *olivescens* (24 mm), in structure, the reddish colour of palpus, purplish antennal shaft and legs and general design of the ♂ almost identical with it (probably a well-defined local race). Forewing perhaps slightly narrower. Head, body, forewing and distal part of hindwing pale fleshy brownish, a trifle paler than the vinaceous-buff of Ridgway. Cell-dot of forewing minute (scarcely visible to the naked eye), costal margin not spotted (beneath narrowly rosy from base to near middle of cell), lines highly oblique, very pale olive-buff, relatively broad, their darker edging in median area very slender and inconspicuous, postmedian very faintly incurved between 3rd radial and 2nd submedian; fringe brighter (more cinnamon), tipped with white. Hindwing whitish in anterior part and cell, shading gradually into the more buff colour; fringe mostly pale, becoming cinnamon near anal angle. Underside rather pale, the postmedian and its dark edging traceable across the wing, from about the 2nd radial curving so as to quit the position occupied on the upperside and run to the costa at least 2 mm from apex; fringe nearly as above. S. W. Africa: Otavifontein, near Otavi, 19 November 1933, type ♂; Sissekab, N. W. of Otavi, 14 November 1933, a rather worn ♂; both collected by Dr. K. Jordan. — ab. **bicolor** *nov.*, a ♂ from Okahandja (R. E. Turner) has the same rather narrow forewing (expanse 25 mm) but retains the greenish tone from base of forewing to postmedian and again on the fringe, the rest as in the type of *demissa*. — **arussiensis** *subsp. nov.* is a relatively large (29 or 30 mm), broad-winged form of a pale brownish colour, otherwise presenting nearly the same aspect as *demissa* and with the same proximally red fringe; postmedian line scarcely so broad, a little more deeply incurved posteriorly; both wings (the forewing especially) with *olivescens.* *demissa.* *bicolor.* *arussiensis.*

a distinct red cell-dot. Arussi-Galla: Ginir, 14 March 1901 (Erlanger), 1 ♂ in the Tring Museum. The hindwing beneath, at least in this specimen, has a postmedian costal spot as in *costipicta*.

ocellata. **S. ocellata** *Warr.* (13 f). Founded on a ♂ from "Natal", without more exact localisation, is best distinguished from all the preceding *Sicyodes* by the ocellated, not punctiform, cell-mark of the forewing. The ground-colour of the forewing in the type is pale fawn with an olivaceous tinge and it has some rather characteristic, though small, blackish vein-spots on the postmedian line anteriorly. A ♀ from Durban, very little larger than the type ♂, is more brown, suffused with ochreous, but is assumed to be the typical ♀ form; *intuens.* antenna very shortly pectinate. — ♀-f. **intuens** *Prout* (? sp. div.) (13 g) can be as small as the type but at times reaches an expanse of 40 mm and is chiefly distinguished by its considerably enlarged cell-spot, which has a diameter of about 1,5 mm and consists of a blackish, red-mixed ring (or square, with blunted corners), the enclosed area white-grey, sprinkled with blackish, occasionally so densely as to appear black-grey. Ground-colour variable, pale pinkish cinnamon or cinnamon-buff. Known from Sarnia, Natal (the type), Zululand and *oenopa.* Cape Colony. — ab. (?) **oenopa** *nov.* is a very beautiful form, of which a ♀ was taken at Katberg (E. Cape Province) in March by Mr. R. E. Turner (typical *intuens* ♀♀ in October and December). Forewing glossy vandyke-red (or slightly purplish), without grey irroration or strigulation, excepting a few blackish marks at costa, costal region in proximal area more brick-red, hindwing pale, with inclination to the forewing colour at hindmargin, especially near the angle; lines of forewing slender, buff, rather approximated posteriorly, cell-spot almost clean white, very slenderly blackrimmed. Underside suffused with vinaceous, otherwise more typical than upper, the vein-dots at the pale postmedian of the forewing developed from costa to 1st median vein. As the hindwing looks slightly more gibbous between the radial fold and the 1st median, it is possible that this may be a separate species.

warreni. **S. warreni** *sp. n.* (= cambogiaria *Warr.*, 1903, nec *Guen.*) (13 g). ♂, 28—34 mm; ♀ 31—34 mm. Palpus red or reddish. Antennal pectinations in ♂ rather long, in ♀ slender, shortish-moderate. Forewing in ♂ typically reed yellow, slightly suffused with olive-yellow, very rarely yellower, and even then more tinged with green than in *cambogiaria* ♂; in ♀ about as in the lastmentioned ♂, rarely (if ever) as in typical *cambogiaria* ♀; a slight (occasionally copious) sprinkling of dark scales; costal edge narrowly reddish proximally, then generally with some red (or distally more fuscous) dots; cell-spot typically (in about 66 per cent.) more or less large (up to 1 mm diameter), fuscous with a slight vinaceous admixture, almost solid or with a pale pupil, which may be larger than a dot and somewhat vinaceous (♂) or yellowish (♀); ♂ with antemedian line occasionally, postmedian never, quite obsolete, the former the less oblique, at times marked with dots on some of the veins, the latter reaching costa near apex, rather variable, almost always dotted on the veins anteriorly, at times throughout; fringe proximally fuscous (or mixed reddish and fuscous), distally white, with dark vein-spots. Hindwing appreciably bulged about the 3rd radial, generally whitish, occasionally more drab (or vinaceous-drab), in the type-form of the ♂ conspicuously green towards tornus; the line only represented by a curved mark posteriorly, in the ♀ and often in the ♂ with some brown or fuscous marking at the tornus itself; fringe behind 2nd median about as that of forewing, the rest pale, virtually unmarked. Underside in ♂ generally very pale green, the forewing with a moderate or large amount of dull or brighter vinaceous suffusion and with brighter rosy costa. Kikuyu Escarpment, February—March 1901, an extremely variable *irrorata.* series of 25 ♂♂ and 7 ♀♀ (see Novitates Zoologicae, Vol. 9, p. 536). — ♂-ab. **irrorata** *nov.* (13 g) is strongly *olivesens.* irrorated, the postmedian line reduced to vein-dots. — ♂-ab. **olivesens** *nov.* The non-ocellated ♂♂ are generally more olive-green, with the lines themselves sometimes weakened, but tending to develop white edgings, culminating in an ab. extraordinarily like Warren's type of *olivescens*. Only the existence of transitions prevents our believing that two species (representing perhaps the *olivescens* and *ocellata* of South Africa) *decipiens.* are here mixed. — ♀-ab. **decipiens** *nov.* (13 g). Only 1 ♀ is quite similar to the typical ♂♂, another (probably not needing a separate name) much yellower and with an antemedian spot in the fold, a third with the postmedian thicker and redder, obsolescent in front of the 1st radial, the antemedian represented by red markings at fold. The other 4 (which I unite as ab. *decipiens*) are deceptively similar to typical ♀♀ of *cambogiaria*, all, however, with a patch of the ground-colour (larger or smaller) at midtermen, one in addition with much yellowish mottling on the posterior part of the dark border; in one of the four the cell-spot of the forewing is obsolete; usually, the antemedian maculation is extended; none have the bordered hindwing of typical *cambogiaria* ♀.

13. Genus: **Eupagia** *Walk.*

The genotype, *determinata Walk.*, is much like an overgrown *Axiodes* and is perhaps linked therewith by one or two species, notably *A. ennomaria;* see the generic description of *Axiodes*. Longer winged than *Derrioides* (the most hairy genus of the *Drepanogynis* group which we have yet discussed), with the distal margins crenulate or dentate, face with a strong, moderately compact tuft, vertex with a similar tuft (some-

what recalling that of the Palaearctic *Compsoptera*, though scarcely so well developed), some loose hair overhanging the eye. Palpus long, the 1st and 2nd joints heavily and closely scaled. Pectinations in the ♂ long, in the ♀ short. Forewing with cell a little longer than in *Derrioides;* 5th subcostal in the ♂ wanting (as in *Derrioides*, etc.). Probably no other known species is strictly congeneric with *determinata;* but *canilinea* and *robertsoni* are provisionally associated with it on account of their similar shagginess; while *curvifascia* and *valida* are still more precariously made a section of *Eupagia*, almost solely on the evidence of the long palpus and frontal tuft and a general agreement in venation.

A. Build slender, hairiness not extreme; wings ample, smooth-margined.

E. curvifascia *Prout* (13 g). 2nd joint of palpus beneath with rather long, lax hair-scales. Antennal pectinations of the ♂ moderate (♀ not yet definitely known). Recognizable by the apical spot or dash, the broad lines (mixed reddish and blackish), curvature of the postmedian, etc.; cell-dot quite small. Grahamstown (type), Cape Town and Kalk Bay. *curvifascia.*

E. valida *Warr.* (13 g). Nearly related to *curvifascia*, slightly different in shape, apical spot wanting, lines brown, antemedian of forewing slender, line of hindwing fairly well developed; but the most striking distinction is in the large cell-spot of the forewing. Founded on a ♀ from Barberton, which I have not seen and whose antenna is not described. Has also occurred singly in Natal (Impetyeni Forest) and Pondoland (Umtali). *valida.*

B. Build robust, hairiness extreme; wings less broad, rougher-scaled, typically with crenate distal margins *(Eupagia).*

E. canilinea *Prout* (13 h). Head and thorax at least as shaggy as in the genotype, 2rd joint of palpus much less long (the entire palpus little over 1½ times diameter of eye. Wing-margins slightly waved, not crenate, costa of forewing nearly straight. The speckled or irrorated appearance of the wings, the hoary scaling of the postmedian and its pronounced inward bend between the 3rd radial and 2nd median are distinctive. Kalk Bay. *canilinea.*

E. robertsoni *Prout* (13 h). Expanse 40—45 mm. Frontal tuft not strong. Palpus nearly as in *canilinea*, loosely haired. Antennal pectinations of the ♂ rather less long than in *determinata*. Both wings with termen at least as nearly smooth as in *canilinea*, costal margin of forewing slightly concave, as in *Axiodes* (to which Janse removes it). The grey tone, broad median area of the forewing, almost regular postmedian and rather weakly marked hindwing render it easy of recognition. Kalk Bay (type) and Stellenbosch. *robertsoni.*

E. determinata *Walk.* (= aropisaria *Walk.*, mosegata *Feld.*) (13 h). The largest *Eupagia* and recognizable at once by its shape and the structural characters given at the head of the genus. Variable in colour from pale brownish to strongly reddish. South Africa, all the types probably from Cape Colony; known also from Orange Free State, Basutoland, Natal and Transvaal. *determinata.*

E. nigerrima *Swinh.* (13 h). Founded on a ♂ from "Abyssinia", which remains unique. Vestiture hairy, but the thorax not quite so broad as in the 3 preceding. Palpus quite moderate. Antennal pectinations not very long. Forewing very dark grey, with an interrupted, curiously shaped brown-blackish band beyond the middle, partly edged with pale scales. Hindwing less dark, outer line present, but not intense. *nigerrima.*

14. Genus: **Axiodes** *Warr.*

As intimated above, this might be sunk as at most a section of *Eupagia* without rendering that genus any more incongruous. As, however, *Axiodes* embraces the great majority of the species, including a considerable number which are very closely related inter se and well removed from *Eupagia determinata*, it seems definitely preferable to conserve it. Face, palpus, thorax above and beneath and femora all exceptionally hairy, crown with a projecting tuft or hood in front; in particular the long hairy clothing of the first and second joints of the palpus is characteristic, while the long, slender, exposed terminal joint stands out in striking contrast. Antenna of the ♂ with long or moderate pectinations; of the ♀ very shortly pectinate or simple. Forewing with costa slightly concave, termen somewhat crenulate, variably in degree; hindwing crenulate, very variable in degree. Subcostal venation of the forewing less stable than in most of the preceding genera; normally it is the 3rd subcostal which it is wanting, but in *bipartita* and *sinuata* it is quite unequivocally the 5th (i. e., no subcostal runs to the termen), while some others (at least the species from *inangulata* to *dami*) are equivocal, as the last subcostal that is present runs out only just behind the apex. A somewhat numerous genus, confined to South Africa, chiefly in Cape Colony.

ennomaria. **A. ennomaria** *Warr.* (13 h). Variable, but the only light brown or ochreous *Axiodes* yet known. As already noted, it comes near *Eupagia*: but inasmuch as it is the 3rd subcostal, not the 5th, which is wanting in the ♂ and the palpus is not typically (though fairly long) I retain it in the genus to which it was originally assigned. Tuft on vertex more compact than in most *Axiodes*. Cape Colony.

agrypna. **A. agrypna** *sp. n.* (12 c, as „*acrypha*"). Wing-shape an exaggeration of that of *ennomaria*, in that the teeth are stronger and a pronounced curve of the distal margin between the 3rd radial and tornus produces a strong prominence at the former. Palpus long and upturned, much as in *ennomaria*. Tuft from vertex very slight: fillet and base of antenna white; antenna non-pectinate for some distance from base, reaching its (shortly) pectinate part through gradually increasing serrations. Abdomen very robust. Colour warmer and deeper (more red) than in any *ennomaria*, farther distinguished by the straightish, firm postmedian line on both wings and especially by the oval dark, white-centred cell-mark of the forewing. This is present also on the underside, which has the rest of the markings much weaker than above, the postmedian curved, more nearly parallel with the termen. Fringes above and beneath dark, distally white between the veins. E. Cape Province: Katberg, 4000 feet, November 1932 (R. E. Turner), 3 ♀♀ in the British Museum.

inaequalis. **A. inaequalis** *Prout* (12 f) is characterized by the irregular distribution of the grey and rust-brown colours of the forewing, as well as by its longitudinal striation. Deelfontein (the type, here figured) and Bloemfontein.

irvingi. **A. irvingi** *Janse* is said to be nearly related to *inaequalis*, at least as regards the genitalia. Expanse 40 mm. Tongue weak. Forewing predominantly light grey, with pale brown suffusion proximally to the subterminal line; the whitish subterminal band not (like the pale area of *inaequalis*) continued along the hindmargin: antemedian line irregular, defined by black distally, by brown proximally; an irregular brown postmedian shade-line, highly dentate, running from near apex to hindmargin, more proximally, posteriorly broadened. Hindwing with a strongly sinuate postmedian line. Bloemfontein, in June, only the type known.

curvaria. **A. curvaria** *Dewitz* (18 a). Larger than *inaequalis*, the forewing divided into more e q u a l portions by the sinuous longitudinal line; the line of the hindwing considerably more proximally placed. Cape, only the type known to me.

bipartita. **A. bipartita** *Warr.* (13 i). Grey, the postmedian line still more oblique than in *irvingi* and not dentate, the brown shade proximal to it shading off inwards and forwards into the ground-colour; hindwing almost unmarked; both wings with a small cell-dot. Kalk Bay.

inangulata. **A. inangulata** *Warr.* (13 i). A rather small and soberly marked species, but unmistakable on account of the extremely acute inward angle of the highly oblique postmedian line at the fold. Cape Colony, the type from the Nieuwveld Mountains; also from Smithfield, Orange Free State.

rufigrisea. **A. rufigrisea** *Warr.* (12 h). Costal margin unusually concave. Brownish grey, the forewing typically tinged with rufous proximally to the antemedian, in some specimens with bluish grey, both lines crenulate or dentate, sharply dentate at fold, cell-dot small; hindwing suffused with brown, the postmedian indicated by its paler edging. ♂ pectinations — as Janse graphically says — reaching to "about ten times [diameter of] shaft in length and spread in all directions." Cape, the type from Cape Town.

fortitimbata. **A. fortilimbata** *sp. n.* (12 f). Pectinations as in *rufigrisea*. The drab-grey ground-colour of the forewing sometimes (type) suffused with tawny-olive about the veins; proximal and distal areas almost entirely fuscous; lines indistinct, tawny-olive, sometimes much darkened with grey, formed of shallow lunules between the veins, the antemedian very oblique (irregularly) from hindmargin to the median veins, here very acutely angled to become oblique inward, its anterior part more or less obliterated by an extension of the proximal dark area, the postmedian less irregular. Hindwing drab, broadly dark-bordered. Underside with the dark borders also moderately well developed. Type ♂ (with the borders not quite so broad as in the figured ♂) from Springboksfontein, Namaqualand; the second ♂, with a handwritten and unfortunately quite illegible locality, September 1885; both acquired by the British Museum from an old collection.

sectilis. **A. sectilis** *sp. n.* (13 i) is also characterized by the heavily darkened borders, that of the hindwing still broader, of the forewing above reduced to a narrow, interrupted subterminal streak. Quite different in its grey colour, white apical mark (smaller than that of *dochmoleuca*), finely white lines, totally different course of postmedian (recalling *inangulata*) and (consequent) characteristic posterior half of median area; in some specimens (including the type) a white line on the base of the 1st median vein cuts this area into two. Fringes, especially of hindwing, strongly marked with white. Expanse 28—30 mm. Cape Province: Worcester, September—October, 6 ♂♂, 1 ♀; Matjesfontein, November, 2 ♂♂; all were collected by Mr. R. E. Turner for the British Museum. The antennal pectinations of the ♂ are long, but much less extreme and more regular than

in the two preceding; those of the ♀ very short. *inangulata* is narrower winged, more tinged with brownish, without the dark borders, the cell-dots present, the postmedian line without a lobe just in front of the 2nd submedian vein.

A. dochmoleuca *Prout* (13 h as „*dochmoleuca*"). One of the smallest *Axiodes*, generally easy to distinguish from similarly coloured forms by the strong black streak from apex and the white streak or patch in front thereof, which invades a part of the median area, not rarely weakening or obliterating the postmedian in crossing it. Postmedian much less oblique than in *inangulata* and *sectilis*, merely incurved at fold and with a small outward tooth at 2nd submedian. Locally common in Cape Colony; occasional also in Orange Free State and Basutoland and about Johannesburg. It is considered to be very variable; there may be two or three species mixed, but as no very definite structural distinctions have yet been found I leave them provisionally as forms of *dochmoleuca* (probably incipient species). — **praefidens** *f.* (? *sp.*) *nov.* (12 a). ♂ slightly broader winged, ♀ perhaps with the pectinations a trifle shorter and more pointed than in *dochmoleuca* ♀; median area of forewing pale, with little suffusion, perhaps on an average broader, this effect sometimes enhanced by a shortening of the central projection of the antemedian; subterminal band with the posterior spot apparently always strongly darkened. Katberg, 4000 feet, November and December (R. E. Turner), 3 ♂♂, 1 ♀ in the British Museum. A worn ♀ from Resolution, Albany District, April 1928 (A. Walton) in the Transvaal Museum probably belongs here. — **cosmeta** *f.* (? *sp.*) *nov.* (12 h). Proximal and much of distal area cinnamon-buff to antimony yellow, median area darkened, postmedian line rather regularly and neatly curved, a subtriangular dark cloud behind the apical streak. ♂ pectinations apparently a little shorter. Deelfontein, type and 2 other ♂♂, among *dochmoleuca*. — Similarly coloured, but larger, examples from Katberg (1 ♂, 1 ♀) seem to have the pectinations as in *dochmoleuca* (or a little l o n g e r), but await more material for their elucidation. *dochmoleuca.* *praefidens.* *cosmeta.*

A. dami *sp. n.* (13 i as „*dani*"). Very like an overgrown *dochmoleuca*, especially to the least brown-suffused, most sharply marked examples. Expanse 34—35 mm. Forewing with veins finely blackened; a conspicuous cell-dot; antemedian line much less acutely angled before middle than in *dochmoleuca*, crossing the median proximally to the origin of its 2nd branch; proximal dark shade of subterminal rather evenly developed. Fringes sharply chequered, distally with clear white spots. Kastrol Nek, January (G. van Son), 5 ♂♂; type in the Transvaal Museum. *dami.*

A. interscripta *Prout.* Expanse 30 mm. Wings a little broader (or relatively shorter) than in most *Axiodes*. Forewing grey, in places with strong white irroration, notably in proximal area and in an obliquely bounded band from near apex outside the postmedian; the latter is incurved centrally, not (as in *dochmoleuca* etc.) at the fold. Hindwing more brownish, with a broad, but not sharply defined, fuscous terminal or subterminal band. Cape Colony: Willowmore; Bechuanaland: Kuruman. *interscripta.*

A. sinuata *Warr.* (13 i) may be known by its browner tinge, black lines, the shape of the postmedian consequent extreme narrowing of the median area posteriorly, the dark shades not within it, but o u t s i d e the black lines, the cell-spot larger than in the preceding group. Distal margin of both wings crenulate or dentate, aspect somewhat *Eupagia*-like. Cape Colony; also known from Johannesburg. *sinuata.*

A. intricata *Warr.* (13 i as „*intribata*"). Rather larger, the brown chiefly confined to the principal veins of the forewing, the postmedian line quite differently formed, narrowly pale-edged distally, a subterminal light-grey band extended almost to termen. Only the original pair, from the foot of the Nieuwveld Mountains, yet known. *intricata.*

A. carbolignea *sp. n.* (14 k). Antenna rather long, pectinations fairly stout, those of the ♀ very short, slightly fusiform. Very much like *trachyacta Prout*, but with termen appreciably crenulate in the parts where in *trachyacta* it is almost smooth, the median area of the forewing more solidly dark, the curves of the antemedian more angular, the postmedian less dentate. Vredendal, Cape Colony, 23—30 July 1927 (G. van Son), 5 ♂♂, 1 ♀, not variable; type in Transvaal Museum. *carbolignea.*

A. trachyacta *Prout.* Expanse 35 mm. Narrow-winged, the forewing only crenulate (weakly) from 1st radial to 1st median. Pale ochreous grey, in part shaded with reddish, distal area of forewing remaining pale; lines of forewing black, antemedian deeply excurved in anterior half, incurved at fold; postmedian from costa (2 mm from apex) to nearly $^2/_3$ hindmargin, irregularly dentate. 1 ♂ from Willowmore, Cape Colony. *trachyacta.*

A. synclinia *sp. n.* (14 k). Pectinations as in *figurata*. Ground-colour browner; median area of forewing more uniformly darkened, its white boundary-lines sharper, quite distinctively shaped, the antemedian with a projection along the median vein. White line of hindwing also sharp. Pretoria, August 1925 (C. J. Swierstra), 1 ♂ in the Transvaal Museum. *synclinia.*

A. figurata *Warr.* (14 k). Pectinations of the ♂ long and rather stout. Pale grey, the median area slightly more brownish and with a proximally ill-defined darker shade just inside the postmedian, sharply *figurata.*

contrasting with the clean area of the ground-colour outside it. The type is a very small ♂ (30 mm) from the Nieuwveld Mountains; a short series from Annshaw (Cape Colony), one of which is here figured, is somewhat
commutata. larger; other known localities are Cape Town and Dunbrody. — **commutata** *subsp.* (? *sp.*) *nov.* (= figurata ♂ part., *Janse*). Considerably larger (42—44 mm) the curvature of the lines somewhat smoother, postmedian not incurved between the radials, median area suffused in posterior half, much more than twice as broad at costa than at hindmargin. "S. Africa" (I believe Natal) (J. A. Clark), type ♂ in my collection. A second ♂, from White River, Transvaal, in coll. South African Museum.

tripartita. **A. tripartita** *Prout* (14 k). Much like a less crenulate-margined *figurata*, but with the ground-colour clearer whitish grey (less irrorated with darker grey), the darkest clouding, more as in *commutata*, in the posterior half of the median area; antemedian line much less excurved, postmedian without denticulation, but with first bend b e h i n d the 3rd radial. Cape Colony: Annshaw, only the type known.

rhodampyx. **A. rhodampyx** *sp. n.* (14 k). Remarkably distinct in the deep green forewing and thorax above and the bright red head and front of thorax. Antennal pectinations about as in *figurata*. Lines of forewing black, very slenderly pale-edged on their reverse sides; fringe slightly paler green. Underside largely suffused with reddish, postmedian indicated. Vredendal, Cape Colony, July 1927 (G. van Son), 1 ♂ in Transvaal Museum.

insciata. **A. insciata** *Feld.* (15 b). The unique type, a ♂ from Swellendam (Cape Colony), is faded, but was probably never so bright and variegated as in Felder's figure, here copied. The general coloration, however, and the course of the two white, only feebly dark-edged lines render the species absolutely unmistakable.

bifasciata. **A. bifasciata** *Dewitz* (14 k). Again abundantly distinct, not only in the zigzag white bands, large and elongate white cell-rings and terminal dashes between the veins (extended on to the fringe), but also in the maculation of the hindwing. Cape and reaching Orange Free State and Transvaal.

15. Genus: **Gonodontis** *Hb.*

(See Vol. 4, p. 330.)

Another genus of robust, more or less shaggy or strongly hairy species, but with simpler venation, all the veins being present in the forewing in both sexes, the 1st and 2nd subcostals arising separately, the 1st occasionally anastomosing slightly with the costal, the 2nd at times connected with the 3rd—4th. In all the known African species the antenna of the ♂ is well pectinate; that of the ♀ is generally simple, in *belli* shortly pectinate. Hindtibia not dilated, all the spurs developed. The genus has a wide distribution in the Palaearctic and Himalayan Regions and is represented (though very sparingly) in North America; in Africa. so far as is yet known, it is almost exclusively eastern and southern. The species have generally a distinctive facies. though there is some variation in shape. See further Vol. 4, p. 330.

perplexata. **G. perplexata** *Warr.* (15 b), described as a *Dyscia*, evidently belongs here. In wing-shape (with the margins almost smooth) and in general aspect reminiscent of some *Drepanogynis;* indeed some confusion has arisen between it and *D. incondita*, from which the venation, less extremely long pectinations, larger and more ocellated cell-spots and especially the strongly-marked hindwing beneath (large cell-spot, punctiform postmedian and rather broad, though ill-defined subterminal shade) readily distinguish it. The ♀ is larger and rather broader winged than the figured ♂. Discovered at the foot of the Nieuwveld Mountains, together with *D. incondita;* known also from Deelfontein. According to the genitalia, near *paliscia.*

homales. **G. homales** *Prout.* Only known from the type ♀, from Groenvei, Eastern Pretoria district. Rather larger than *perplexata* ♀, expanding 44 mm. Forewing with apex minutely produced, termen otherwise smooth, slightly gibbous in anterior half; tone very pale drab, much less irrorated than in *perplexata*, cell-ring rather large, postmedian line only indicated by a costal dash. Hindwing shading off to whitish proximally, the cell-spot wanting above, very small beneath. Face prominent, sloping, with a tuft below. I now strongly suspect it is a *Pareclipsis.* Palpus about twice as long as diameter of eye.

stictoneura. **G. stictoneura** *Prout* (18 c). Probably nearer to *perplexata*, though more yellowish, less irrorated, the cell-ring of the forewing more inclined to break up into dots, the vein-dots on the lines strong, the postmedian accompanied distally by a pale line. Underside closely similar to that of *perplexata.* Cape Town to Kalk Bay.

integraria. **G. integraria** *Guen.* (15 c), founded on a ♀ from "Abyssinia", is only known to me from Guenée's description and Oberthür's figure, here reproduced. From these I judge that it differs from *perplexata* and *stictoneura* in its somewhat more rounded forewing, narrower cell-mark (on the underside linear), absence of the inward curve in the posterior half of the postmedian and in the underside, which apparently shows no traces of a subterminal shade.

G. noctuodes *Warr.* (15 d), on which was founded a superfluous genus *Buttia*, is rather smaller and much darker than *perplexata* (15 b), the pectinations a little shorter and stouter, the apex of the forewing less acute, the postmedian line on both wings more deeply inbent between the radials, the cell-mark of the hindwing small and weak, the forewing beneath more suffused and weak-marked, the subterminal shade of the underside wanting. Foot of Nieuwveld Mountains, only the type known. *noctuodes.*

G. paliscia *Prout* in a measure links the preceding group (in which the anterior part of the termen of the forewing is only waved, or in *homales* quite smooth) with *erebaria*, which definitely approaches the shape of the more typical *Gonodontis* of the Palaearctic Region. Larger than *erebaria* (about 44 mm), pectinations longer, crenulations of termen slight, irrorations and cloudings of forewing strong, dark fuscous, in particular a band-like proximal shading to the postmedian (in this and the form of the antemedian line recalling *Crocallis boisduvalaria*, Vol. 4, pl. 16 g); postmedian twice incurved, i. e. at both folds. Hindwing above comparatively pale, the cell-spot shadowy. Underside strongly marked, the postmedian of the hindwing thick, lunulate-dentate, with a deep V-shaped angle inward at the radial fold; dark shades of outer area present, interrupted, on the forewing anterior only, but extended to the apex. Stellenbosch, Cape Colony; also Cape Town? *paliscia.*

G. erebaria *Guen.* (15 c). Distinguishable from all the other South African *Gonodontis* (unless *indecoraria* is a species) by its shape and tone. The original ♂♂ expanded about 40 mm, but most of the ♂♂ known to me are considerably less (down to 34 mm). Forewing beneath not strongly marked, but showing the ill-defined beginning of a brown subterminal band, reaching about to the 2nd radial. Pectinations moderate (3 or 4 times diameter of shaft). Cape (loc. typ.) and Pondoland. Variation not great, but puzzling, consisting in the form of the lines. The (generally very weak) antemedian commonly runs tolerably direct from costa to the bend at the fold, but sometimes it is bent (or bluntly angled) ab b o t h folds (as in ab.? *indecoraria*); the degree of sinuosity of the postmedian also varies. — ab. (?) **indecoraria** *Walk.*, a worn ♂ from "S. Africa" (Cape) is rather dark, except terminally, and has the antemedian as noted above, the postmedian so nearly straight that I first thought it should be a species, but intermediates perhaps occur; the termen also seems slightly less dentate than in *erebaria*. A ♂ from Stellenbosch has the same postmedian, but is not so dark and has the antemedian only once bent (at fold). The genitalia show no tangible differences, but there may be some in the number of pectinated antennal joints. *erebaria.* *indecoraria.*

G. craterias *sp. n.* (15 d). Only known from the ♀, which — like that sex in *erebaria* and some others — has the teeth of the distal margin of the forewing stronger than in *Gonodontis* ♂♂ of this group. Both wings rather narrow, the forewing with fuscous suffusions, much as in *paliscia*, both wings with rather strong irroration, that of the forewing blacker; the conspicuously black cell-spot of the forewing gives it a distinctive appearance, otherwise the markings are similar to those of *erebaria* but more angular, the antemedian with a streng tooth outward in the cell in addition to the submedian curve or angle. Arusha district, Tanganyika Territory: Old Lengui Crater, 5000 feet, March 1921 (type); Ngorongoro Crater, 5800 feet, February 1921 (paratype, here figured); both collected by the late T. A. Barns. *craterias.*

G. acyrthoria *sp. n.* Expanse 43—44 mm. ♂ pectinations long. Forewing with terminal teeth small and blunt in the ♂, sharp in the ♀ (as is also the apex). Red-brown, more fuscous in the ♂, the principal veins lighter; antemedian line obsolescent in the ♂, better expressed in the ♀; postmedian straight, whitish, unusually distally placed; terminal dots rather large. Forewing beneath paler and greyer as far as the postmedian, costally and distally tinged with cinnamon-buff, cell-mark weak, a white or light-grey apical spot; hindwing rather browner than above, cell-mark and postmedian strengthened, the latter especially on the veins. W. Kivu: Lowowo Valley, S. Lowa district, 4000 feet, in Mountain forest, March 1924, wet season, 2 ♂♂ and a ♀ collected by T. A. Barns. — **camerunica** *subsp. nov.* (15 c) is a rather bright and glossy form, nearly like the ♀ type in colour. but with the veins less strongly differentiated, terminal dots weaker, cell-spots somewhat enlarged, line of hindwing bent before reaching hindmargin. Mt. Cameroon: Musake, 6350 feet, January 1932 (Miss M. Steele), 4 ♂♂, type in the British Museum. *acyrthoria.* *camerunica.*

G. ochroneura *sp. n.* Expanse 46 mm. In structure and coloration close to *acyrthoria*. Forewing slightly greyer, the distal area also somewhat suffused with grey, therefore less strongly contrasted; veins rather sharply pinkish-buff; antemedian line white, very slender posteriorly, less so anteriorly, at costa 5 mm from base, strongly oblique outward to middle of cell, slightly less so to median vein, excurved between this and 2nd submedian, strongly oblique inward to hindmargin at 6 mm; cell-mark as in *azelinaria* (15 d); postmedian fine, less near termen than in *acyrthoria*, more sinuous; terminal dots weak; fringe clouded with grey. Hindwing as in *acyrthoria* or slightly darker. Underside with the veins more brightly buff than in *acyrthoria*, distal area of forewing scarcely differentiated; postmedian line strongly punctiform, on the hindwing crenulate and with slight curve inward between the radials and prominence at 3rd radial. W. Kivu: Middle Lowa Valley, near Walikali, 3000—4000 feet, in forest, February 1924 (T. A. Barns), 1 ♂. May conceivably be a form of *aze-* *ochroneura.*

linaria, but fuscous (not cinnamon), the veins more outstanding, the antemedian more oblique anteriorly, the postmedian angled instead of lobed in the middle, the hindwing and underside darker. A smaller (38 mm) and perhaps slightly broader winged ♂ from Rau, Nandi Country, with the cell-spots slightly less developed, may represent a separate race or a mere aberration. — A ♂ from Kampala looks somewhat shorter and broader winged still, and as the terminal teeth of its forewing are scarcely so strong, the veins less sharply differentiated,

aïdna. the median area more infuscated. I suspect it may prove to be a separate species: **aïdna** *subsp.* (*? sp.*) *nov.*

dicyrta. — **dicyrta** *subsp.* (*? sp.*) *nov.* (15 d) is another somewhat doubtful, broad-winged form, smaller than *ochroneura* (39—41 mm), the cell-mark of the forewing much as in the type form, that of the hindwing feebly developed; dark irroration and strigulation not intense, veins not notably pale, antemedian of forewing scarcely white-edged, postmedian very slenderly so, the latter forming 2 r e g u l a r inward curves, separated by the strong prominence at the 3rd radial; hindwing with a variable (similar or weaker) tooth in the postmedian. Kikuyu Escarpment, 6500—9000 feet, 3 ♂♂ in the Tring Museum.

azelinaria. **G. azelinaria** *Swinh.* (15 c) is the largest (exceepting *aemula* ♀) and most cinnamon-coloured of the African *Gonodontis* and as the ♂ is still unknown the possibility is not absolutely precluded that it and *ochroneura* might be the sexes of a single species (see above). The peculiar cell-mark of the forewing (white on the discocellulars bordered by 4 black spots) is nearly the same (though the pale part looks scarcely so white in *ochroneura*), but this formation is shared by some other species and even by some Palaearctic *Crocallis;* the divergence of size (compare *aemula*) and of colour would not offer any barrier to the union, but the form of the postmedian line seems too different. The type is from Kilimandjaro, a second example from "Kenya Colony" (T. G. Anderson).

curticosta. **G. curticosta** *Prout* (15 d). Costal margin of the forewing perhaps even more markedly shortened than in the neighbouring species, that of the hindwing, on the contrary, decidedly elongate, termen of the hindwing less convex than in most *Gonodontis*. Smaller and more deeply coloured than *aemoniaria*, antennal pectinations still longer, thorax still more densely hairy. Both wings beneath with the cell-mark large and conspicuous, intersected by the veins; postmedian line indistinct, chiefly indicated by vein-dots. Aberdare Range: bamboo forests of Mount Kinangop, at 2500—3000 m (the type) and in alpine meodows 3000—3100 m, 2 ♂♂.

orographica. **G. orographica** *sp. n.* (15 g). Expanse 42 mm. Similar to *curticosta*, pectinations much less long, costa of forewing relatively almost as short, teeth at 1st and 3rd radials rather stronger, hindwing somewhat less elongate costally. Coloration much darker, not reddish; the black lines partly thickened with blackish shading in the median area, finely edged with whitish grey on their reverse sides, the antemedian with a deeper angulation outward at fold than in *curticosta*, the postmedian with the lobe between the radials larger; cell-spot large, oval; subterminal irregular, with some dark maculation proximally. Hindwing much more uniformly fuscous above, beneath strongly marked (cell-spot large, a thick crenulate black postmedian). Forewing beneath relatively weak-marked, but with more conspicuous white-grey scaling between apex and 1st radial. Uganda: Birunga Mountains, February 1933 (G. L. R. Hancock), 1 ♂ in the British Museum. Apart from its exceptionally dark colour, *orographica* may be known by its strong subterminal markings.

aemoniaria. **G. aemoniaria** *Swinh.* (15 d). Palpus elongate, with rather long, exposed 3rd joint. Antennal pectinations of the ♂ very long. The shapely forewing, pale ground-colour and large, intense cell-spot give *aemoniaria* a distinctive appearance; median area narrow, both lines highly sinuous, but only distinct at costa and on the veins. Hindwing and underside weakly marked, the latter with rather large but not intense cell-spots. ♀ greyer, with sharper markings. Mau Escarpment: El Burgon, the type series; also recorded from Kikuyu Escarpment.

eupages. **G. eupages** *sp. n.* (15 e). Close to *aemoniaria* but shorter winged, especially the hindwing costally; less pale; antennal pectinations less long (5 or 6 times diameter of shaft). Forewing variegated, light purplish grey and rather bright avellaneous, the latter colour purest in a proximal-subterminal band and on parts of the median shade and its branches; rather sparse blackish irroration; the large black cell-spot with a few pale scales in its centre; costal edge with copious blackish strigulae, irregularly grouped; antemedian line incomplete; postmedian punctiform, triangularly thickened, rather sharply angled at 1st radial, then incurved. Hindwing pale, suffused except at costa with drab-grey; postmedian line faint, marked with small blackish vein-dots. Both wings beneath whitish, costally and subterminally suffused with brown, in part (especially hindwing) irrorated as far as the postmedian; both wings here with moderate black ocellus and punctiform postmedian, the latter at 4 mm. from termen. W. Kivu: Kisiba, Bugoie Forest, 8500 feet, November 1921 (T. A. Barns), 1 ♂.

aemula. **G. aemula** *sp. n.* (15 e). Superficially very similar to *aemoniaria*. Palpus with 3rd joint not elongate. Pectinations considerably less long. Forewing of the ♂ with the terminal teeth much slighter; rather more irrorated, the costal spots large, the lines otherwise still more obsolescent, at hindmargin shown by approximated black dots. Hindwing and underside rather less weakly marked than in *aemoniaria*, the forewing beneath

with small whitish apical patch, bounded proximally by a distinct brown costal mark. ♀ much larger, a good deal like an overgrown *aemoniaria* ♀ (52 mm) but with the very large cell-spot of *aemula* ♂ and with the median area strongly mixed with red-brown. Solwezi, N. Rhodesia, August 1917 (2 ♂♂) and July 1917 (1 ♀), collected by H. C. Dollman and now in the British Museum.

G. belli *sp. n.* (15 e). Similar to *aemula* in shape and structure, but very much smaller, the cell-mark *belli.*
of the forewing pale-centred, the costal spots wanting, the median area broader, browner and better defined, the postmedian line irregularly crenulate but without any strong projections. Cerambe, Bihé, Angola, March 1903 (W. C. Bell), type ♂ in the Tring Museum, not very fresh, but easily recognizable. A ♀, less small (38 mm), the median area less broad, has just been received by the same Museum from Gamba, Bihé (R. Braun) and shows the antenna to be shortly pectinate.

G. breviata *Prout* (15 e). Tongue apparently slight. Antennal pectinations of the ♂ in proximal part *breviata.*
part long. Forewing nearly as truncate as in *curticosta* (15 d) but not quite so broad, midtermen less prominent, tone quite different, less glossy, less black-marked, terminal area more contrasted with the rest. Hindwing less elongate costally, more whitish, cell-spot wanting above, very small beneath, postmedian above incomplete. Both wings beneath with punctiform postmedian. Known from a few localities in Kenya Colony and from Birunga; type locality: Kibwezi.

G. xera *Prout* (15 e), founded on ♀♀ only, has the palpus rather short, the antenna rather strongly *xera.*
serrate, the tongue weaker than in *aemoniaria*, the sinus between the 1st and the 3rd radial of the forewing rather deeper, the 2nd radial arising somewhat before the middle of the discocellulars. Easily known by its exceptionally pale colouring and weak markings; cell-spot of forewing larger beneath than above, underside of hindwing with a small grey cell-spot and very weak postmedian dots. Kibwezi, Kenya Colony; also occurs about Nairobi. A more strongly marked ♀ from Suna, S. Kavirondo, may represent a separate race. A ♂ from Dire Daoua, recently received, is considerably smaller, slightly narrower winged, the terminal marks in part obsolete.

G. briela *Debauche* (17 a). The description of this species arrived too late for insertion in sheet 18, where *briela.*
a better position might have been found for it. Antenna slender, with the cilia almost 1. Margins more denticulate than in *paliscia*, central projection of postmedian line stronger, no subterminal shade beneath. In colour rather near *integraria*, but with much less smooth margins and firmer (non-punctiform), much more sinuous lines. Perhaps related to the much larger, brighter *azelinaria* (15 c). Abyssinia: Mt. Chillálo, ca. 9000 feet, 1 ♀.

16. Genus: **Nassunia** *Walk.*

Palpus minute. Tongue vestigial. Antenna pectinate, in the ♀ only very shortly. Hindtibia with all spurs. Abdomen of the ♂ slender, of the ♀ robust. Scaling smooth. Wing-margins not angled; forewing with 1st and 2nd subcostals coincident. A very distinct genus; it has a good many characters in common with the Palaearctic *Dyscia* (Vol. 4, p. 407), but differs in its more minute palpus, glabrous femora and the subcostals of the forewing. Only 3 species are yet known, easily distinguishable by their coloration.

N. caffraria *L.* (= petavia *Cram.*, petaviaria *Hbn.*, bupaliata *Walk.*) (17 a). The genotype and most *caffraria.*
widely distributed species. It has no yellow or orange colouring on the wings except as a surrounding, narrow or broad, to the dark markings (sometimes so ample, at least in the ♀♀, as to become confluent and form irregular ante- and postmedian bands on the forewing) and some basal maculation on the forewing. Cape (loc. typ.) and extending northward to Angola, Uganda and S. Kavirondo. — **socors** *subsp. nov.* has the ground- *socors.*
colour similar or paler, occasionally almost white, the black dots small, the yellow which accompanies them very slight, sometimes (perhaps about the cell-spot always) entirely wanting. All the specimens known to me from S. W. Africa belong to this form; type ♂ from Tsumebi (coll. Brit. Mus.).

N. pretoria *Prout* (17 a). Larger than *caffraria*, hindwing predominantly orange-yellow, its terminal *pretoria.*
area concolorous with the forewing; black dots obsolescent; forewing beneath in part orange. Transvaal.

N. aurantiaca *Prout* (17 a). 34—36 mm. Hindwing above orange to termen, forewing browner; wings *aurantiaca.*
beneath (except at apex and termen of forewing), reversing the coloration of upperside. S. Mozambique, particularly about Delagoa Bay. A ♀ (ab.?) from Zululand, mentioned by Janse under *pretoria*, seems to agree but has the forewing avellaneous (underside not described).

17. Genus: **Palaeonyssia** *Harrison.*

Face and the short palpus hairy. Tongue wanting. Antenna of ♂ long and stout, bipectinate, with very long branches. Thorax and abdomen robust, breast shaggy, abdomen very feebly covered with weak

scales, as in the Palaearctic *Megabiston* (Vol. 4, p. 358). Legs in ♂ largely hairy; hindtibia with terminal spurs only. Forewing in with cell rather long, 1st and 2nd subcostals shortly stalked. ♀ semiapterous. The only known African genus of definitely the *Biston* group, the ♂ genitalia, according to Harrison of a somewhat primitive type. Only one species.

trisecta. **P. trisecta** *Warr.* (15 f). Unmistakable on account of its structure, shape, the almost wingless ♀, etc. The latter, which was unknown to Janse, has been bred by C. T. Leigh at Durban and by Miss F. Barrett in Transkei and has the wings reduced to very short thick stumps. The larva has not been described. Trans-
fuliginosa. vaal to the north-eastern parts of Cape Colony, the type from Natal. — ab. **fuliginosa** *Warr.* is merely a much darkened, almost melanic form, not a species as Warren supposed. Another aberration has the median area of the forewing greatly narrowed. From the recorded dates (late October to January), it appears that *trisecta* is not, like nearly all its Palaearctic relatives, a winter or early spring species; hence some of the theories which have been advanced concerning the evolution of apterous ♀♀ in the group would be inapplicable.

18. Genus: **Omphalucha** *Warr.*

Presumably one of the links between the *Biston*, *Hyposidra* and *Boarmia* groups, perhaps related to some of the heterogeneous assemblage to which the generic name of *Hemerophila* is still applied in Africa, but the build is more robust and the tongue rudimentary (short even in Sect. II) and in fact it shows most of the characters which are generally attributed to *Biston* vera (type *strataria Hufn.*, see Vol. 4, p. 358), though the cells are somewhat less long and the hindwing usually more crenulate, while the ♂ possesses a fovea, though it is rarely strong. Less shaggy than *Palaeonyssia*, the ♀ fully winged, the face rather flat, roughened with hair-scales, the hindtibia with 4 spurs. Antennal pectinations of the ♂ never really long, generally very characteristic, being stiff and almost vertical in relation to the shaft. Subcostals of forewing variable, the 1st and 2nd generally more or less stalked, sometimes in the ♂ separate; in the ♀ coincident. So far as is known, exclusively African; the anomalous Indian "*Hybernia*" *hibernaria Swinh.* has much in common with some of its less typical species, but with long pectinations. Genotype: *crenulata Warr.*

Section I. *Omphalucha* (vera).

katangae. **O. katangae** *Prout* was provisionally placed here on account of the palpus, shape and pattern, but is only known from a ♀ which has lost its hindlegs and has the tongue somewhat too well developed to remain satisfactorily here. 38 mm. Forewing with 1st and 2rd subcostals coincident; "pecan brown" (Ridgway), with black irroration, an anterior part as far as the postmedian white (similarly irrorated), in the central area reaching the median vein and the base of its branches, between the radials encroached upon by a projection of the brown distal area which nearly reaches the long, black cell-mark; lines black, the antemedian right-angled (outward) in front of cell-fold, irregularly oblique inward posteriorly, with a spot on median vein; post-median sinuous, its long, shallow inward curve at the fold slightly macular; median shade indicated by a costal spot; subterminal white, interrupted, conspicuous and black-bordered from tornus to 2nd median; terminal line slightly interrupted; fringe white, black-spotted. Hindwing subcrenulate, with a shallow sinus between the radials; scarcely any white except at base; markings indistinct, the postmedian dentate, with 2 marks (on 3rd radial and 1st median) more conspicuous. Underside much more blurred, only the postmedian of the hind-wing more distinct. Katanga: Kipushi.

maturnaria. **O. maturnaria** *Möschl.*, founded on a ♀ from Bazeia, Caffraria (Tembuland), is one of the browner species of the genus, but does not seem to belong to any of the forms which I have seen; to judge from the careful description, which makes more of the sinuosities and angles of the lines than does the original figure, the latter cannot be quite accurate, but it is impossible to see in it the characteristics of the following species, which I have hitherto sunk. Antemedian of forewing at hindmargin less close to the base than in *crenulata*, line of hindwing with the the tooth at the fold then "strongly" (in the figure scarcely!) arcuate, but apparently without tooth at radial fold.

crenulata. **O. crenulata** *Warr.* (= maturnaria *Janse*, nec *Möschl.*) (15 f). Fovea strong. Variable, especially in colour, but generally distinguishable (unless from *albosignata*, q. v.) by the postmedian line of the hindwing, which is angled at both folds, rather deeply curved inward between the angles and approximated to the distal margin at its posterior end. The median shade of the forewing is generally slight and ill-defined, sometimes obsolete. The type, a ♀ from Natal, represents a fairly frequent form (especially, I think, in that sex) in which both wings are heavily irrorated and suffused with fuscous, the clear (brown or buff) subapical spot of the fore-
hirta. wing standing out rather conspicuously. — **hirta** *Warr.*, founded on a ♂, is also from Natal (Durban) and is more variegated, with paler brownish hindwing, anteriorly without markings, making a near approach towards *albosignata Janse;* indeed it may possibly prove to supplant that species. — The recorded range of *crenulata*

is from the Orange Free State and Natal to S. Rhodesia, but the British Museum has it also from some localities in eastern Cape Colony. The larva, according to Mr. E. E. Platt of Durban, feeds on Rhus villosa and Combretum gueinzii. — ab. loc. (? subsp.) **clarescens** *form. nov.* All the 5 examples which I have seen from Kenya Colony are of a form which appears only very rarely in South Africa, in the ♀ forming a remarkable colour-contrast to typical *crenulata;* median area of forewing whitish, or in one example yellowish, the proximal and distal areas predominantly red-brown, the subterminal in places strong and white. Kibwezi (W. Feather). 4 in the Tring Museum, including the type; Voi Plantations (G. Montague Smyth) a large ♀ in the British Museum; ♂ of the form unknown. *clarescens.*

O. angulilinea (*Warr.* M. S.) *Janse* is unknown to me except from the original figure and description, but is evidently an *Omphalucha;* as, however, Janse, a careful observer, described it as a *Boarmia*, I suppose its tongue to be somewhat less reduced than in *crenulata*, though the possibility is not excluded that Warren's evidently erroneous reference to *Alcis Hbn.* (12-veined) misled and that it was transferred to *Boarmia Tr.* (11-veined), without special examination of the head, as being the most extensive genus in the *Alcis* group whereto its venation might refer it. If the structure agrees, I can point out no distinction from *crenulata* except the pale (little-irrorated) white-yellow median area, which would approximate it to *crenulata* f. *clarescens.* 1 ♀, rather worn, from M'fongosi (Zululand), expanding 42 mm. *angulilinea.*

O. epixyna *sp. n.* Expanse 33 mm. Face with a projecting tuft between the antennae. Outer series of pectinations considerably longer than inner. Forewing with termen strongly oblique, hindwing rather short costally. Forewing with the antemedian as oblique posteriorly as in *crenulata* (15 f) but not incurved to costa: cell-mark long; postmedian moderately curved; subterminal distinct, interrupted by a buff-tinged spot from 2th subcostal to behind 1st radial and a double dark longitudinal streak at 2nd radial. Hindwing anteriorly whitish, though not quite so sharply and extendedly as in *albosignata.* Ufiome Mountain, 50 miles S. of Lake Manyara, 4500 feet, open forest, mostly thorn, March 1921 (T. A. Barns), 1 ♂ in the British Museum. *epixyna.*

O. albosignata *Janse* is also very similar to *crenulata* (15 f) but is easily distinguished by its hindwing, which has the anterior part (about to the radial fold) almost pure white. Expanse 36—38 mm. The forewing seems to be slightly more rounded at the apex and to lack the warmer tones which are often conspicuous in *crenulata.* The genitalia show considerable differences. Transvaal: Naboomspruit, type and another ♂; also a ♂ from Emangeni, S. Rhodesia. *albosignata.*

O. exocholoxa *sp. n.* (15 g) can well be placed between *albosignata* and *indeflexa;* forewing shaped as in the latter, hindwing with the anterior part almost as pure white as in the former, only with the fine median line continued to the costa. Antemedian strongly oblique, from an angular costal spot, median of both wings fine, crossing the cell-dot, on the forewing also with a loop outside it, postmedian with one small outward curve. Underside whitish, with most of the markings reproduced. Antenna pectinate to about the 40th joint, about 5 apical joints non-pectinate. Tsumebi, S. W. Africa. 1 ♂ in the British Museum. *exocholoxa.*

O. indeflexa *Prout* (15 g). Here, again, the ♂ genitalia show that we are dealing with a separate species, of which hitherto we known only the type ♂ and a ♀ associated with it by Janse, both collected at Pretoria in March. Our figure, of the type makes the wings scarcely broad enough and slightly exaggerates the whiteness of the subapical spot, but otherwise gives a fairly accurate representation. Apart from the shape and coloration, the much more direct postmedian distinguishes it readily from *crenulata.* The ♀ figured by Janse looks to me (except in its anteriorly more oblique antemedian line) much like *rufinubes.* *indeflexa.*

O. ditriba *sp. n.* (17 b). Palpus short, in the ♂ slightly shorter than in *crenulata.* Forewing with apex slightly more rounded, termen regularly curved; irroration and dark clouding strong but (especially in distal area) irregular; antemedian line shaped as in *crenulata;* cell-mark fairly strong, black; median shade always present, sometimes rather strong, about the cell-spot appearing double, its proximal part the more direct, its distal (and perhaps stronger) part making a loop round the outside of the cell-spot; postmedian more sinuous than in *indeflexa*, less so than in *crenulata;* subterminal incomplete, but forming, in addition to the common subapical spot, a second and whiter one (sometimes large and somewhat quadrate, about as in *rufinubes*) between the 3rd radial and 2nd median. Hindwing generally lighter in proximal area, just outside the posterior part of the postmedian line and at times in a subterminal patch between 3rd radial and 2nd median; median shade fairly strong, proximal to the cell-spot, at hindmargin quite near the postmedian; postmedian very gently curved or sinuous (nowhere angulated), somewhat crenulate, running near the cell-spot. S. Rhodesia: Bulawayo, 22 November to 30 December (R. Stevenson); type ♂ and 2 ♀♀; Wankie (C. W. Taylor), 1 ♀. — **zoutpanensis** *form. nov.*, from Zoutpan, Transvaal, December and February (G. v. Son), is a somewhat more variegated form, with the cell-spots and black lines strong. 2 ♂♂, 3 ♀♀, type ♂ in the Transvaal Museum. There is a rather broad-winged ♀ from Kurino, E. Transvaal, in the British Museum. — As the ♂ type of *in-* *ditriba.* *zoutpanensis.*

deflexa showed just a trace of the characteristic pale mid-subterminal spot, there is a bare possibility that this rather distinct-looking species may prove to be a form thereof.

rufinubes. **O. rufinubes** *Warr.* (15 h). Rather larger and broader-winged than *ditriba* (17 b), wings much less dark-mixed, median area of forewing broader, antemedian nearly perpendicular anteriorly, accompanied proximally by a narrow dark shade, postmedian followed by a red-brown shade; both wings with a subquadrate pale distal spot between 3rd radial and 2nd median, edged by a blackening of those veins; median shade of hindwing more nearly parallel to postmedian than in *ditriba*. Angola: N. Bailundu, the type ♀; besides, I only know definitely the larger greyer ♀ from Kasama, N. Rhodesia, here figured; but I strongly suspect that a smaller, less broad-winged ♂ from N. W. Rhodesia (H. C. Dollman), with the ground-colour of the type, the markings nearly as in the Rhodesian ♀, but the postmedian of the hindwing somewhat more angled in the middle, belongs to them; perhaps also a still smaller ♂ (32 mm) from Bulawayo, with the antemedian still more oblique, the cell-spot broader, the postmedian more proximally placed.

apira. **O. apira** *sp. n.* (15 g). Palpus short. Antenna with about 42 joints, the longest pectinations scarcely over 3 times the diameter of the shaft, the last 5 or 6 joints scarcely pectinate. Forewing shaped about as in *rufinubes*, first 2 subcostals stalked (in the paratype very shortly); fovea rather strong; cell-mark less narrow than in *rufinubes*, antemedian bending inward anteriorly, more as in *ditriba*, and without noticeable reddish or fuscous shade proximally; the rest much as in the less bright *rufinubes*, the postmedian rather more proximal, the shade outside it ill-defined. Hindwing appreciably broader than in that species; median shade at least as proximal as in *ditriba*, postmedian close to cell-spot and without the characteristic sinuosities of *Omphalucha*. Underside a little paler, similarly marked. Angola: Morro de Pundo, 60 km N. E. of Lobito, 21 May 1934 (K. Jordan), 2 ♂♂ in the Tring Museum. A worn ♂ from Bulawayo is similar but looks less broad-winged, line of hindwing angled, etc.

praeses. **O. praeses** *sp. n.* (15 i). Although the structure is quite normal, this species presents a somewhat distinctive appearance on account of the shape of the hindwing; in addition to its somewhat stronger crenulations, with deeper excision between the radials, it has the tornus more prominent than in any of the others. Cell-spots diffuse, particularly on the forewing, the pale, buff-tinged subterminal spot in front of the 1st radial conspicuous, though not quite sharply defined. Hindwing better marked, the curved median shade well before the cell-spot, the whitish subterminal in part dark-edged proximally, its shape characteristic. Underside somewhat striking, the cell-spots enlarged and more blackish, the distal area partly suffused with red-brown, so that the colour-scheme is strongly reminiscent of that of *Eulycia grisea*. Mt. Mlanje (Dr. S. A. Neave), type ♂ in the British Museum. A rather worn ♂ from Wankie, S. Rhodesia (coll. Transvaal Mus.) is a little smaller, an equally worn ♀ from Bulawayo larger. In the type the first 2 subcostals of the forewing are very shortly stalked, in the Wankie ♂ separate.

nubimedia. **O. nubimedia** *sp. n.* (15 i). Another Tanganyika discovery of Mr. Barns's. Face rather prominent, the tuft above short, dark. Tongue perhaps too well developed for a true *Omphalucha;* pectinations short (well under 3 times diameter of shaft). Wings broad, inclining to snuff-brown. Forewing with median area broad, the weak projection of the postmedian forming 2 small teeth (on 3rd radial and 1st median). Hindwing with costa not whitened, markings complete. Underside similar. District of the Great Craters, February—March 1921, 1 ♂. The Tring Museum later received a damaged ♀ from Dungu, Upper Uelle district, N. E. Congo, June, with the postmedian line rather more proximally placed; and the same collection contains two ♀♀ from Suna, S. Kavirondo.

extorris. **O. extorris** *Warr.* (15 f) may be known at once by its shape, in particular the extreme rounding off of the anal angle of the forewing. Exceptional also in the pectinate ♀ antenna and a few other details, but seems to fit better here than in any other known genus. Markings (except as a rule the dark costal spots) very weak. Larva rather stout, tapering somewhat to both extremities, each segment slightly swollen, but without humps. Variable in colour, light-brown or or darker and more reddish; speckled throughout with darker brown and blackish, which is sometimes sufficiently concentrated in places to form a dorsal pattern. (From 2 preserved larvae, Congella, G. F. Leigh.)

subpunctata. **O. subpunctata** *Warr.* (15 f). Described as a "*Eubyja*" *(Biston)*, this has been moved from genus to genus, but seems to find its best resting-place in *Omphalucha*. Its atrophid tongue and the presence of a fovea exclude it from *Hemerophila*, the latter character also, as well as the wing-shape and pattern and the less hairy vestiture, from *Aphilopota*, with which latter the moderately long pectinations and the coincidence of the first two subcostals, even in the ♂, might have placed it. Known chiefly from Natal; Janse adds Warmberg, N. Transvaal.

accentuata. **O. accentuata** *Feld.* (= dentilinea *Warr.*) (15 h) differs from *subpunctata* in the sharp angulations of some of the lines and the strengthening of the subordinate markings, which in large measure takes away from

the more typical *Omphalucha* effect of the pattern of *subpunctata*. Knysna (Felder's type) to Zululand and the Transvaal.

Section II. Tongue less rudimentary. Breast and femora less densely hairy (*Heterimpia* ex *Warr.* MS.).

O. brunnea *Warr.* Less typical than the preceding group not only in the characters given above but generally in a slight reduction of the length of the cells and increased development of the fovea. I accept Warren's latest published reference of the species to *Omphalucha* (1905), but it may be necessary to resuscitate his suppressed *Heterimpia* of the same date, with type *ambusta Warr.* Pectinations a trifle longer than in most of Sect. I, wing-pattern different. The type ♂, from Unyoro, was rubbed and not specially small, but I incline to unite it with the small form which occurs in Bahr-el-Ghazal and the Lado Enclave and as the ♀ antenna seems slightly more serrate in this than in the Angola there may possibly be two close allies confused. This (provisional) *brunnea* is sharply marked but with the costa of the forewing not or little infuscated. — **unimoda** *subsp. nov.* More unicolorous, sometimes darker and greyer. Rather larger than the Bahr-el-Ghazal ♀♀, antennal structure about the same, wings relatively somewhat more elongate, the forewing very weakly marked, its cell-spot diffuse and inconspicuous. Ropp, Northern Nigeria (Dr. J. A. Brabury), 4 ♀♀ in the British Museum. — **lignaria** *Warr.* (♀ = ambusta *Warr.*) (15 i), both types from Angola, is about as sharply marked as *brunnea*, in general larger, the costal region of the forewing more or less strongly infuscated, the rest of the median area of that wing generally paler brown than the proximal and distal, the terminal shade as a rule very heavily blackened; cell-spot small, but moderately sharp. Locally common, not only in Angola but in Kenya, known also from the Upper Congo. *brunnea. unimoda. lignaria.*

O. indigna *Prout* (17 b), described as a *Cleora*, though the short palpus, non-dilated hindtibia, etc. were noted, can scarcely be separable generically from *brunnea;* the tongue, however, may be slightly stronger. Neither wing anteriorly so elongate as in that; otherwise it can be so similar, that the aberration (or subspecies) here figured, a ♂ from Fort Grampel, French Congo, long stood undetected in my collection as *brunnea;* the pectinations are not continued quite so far down the shaft and the dark terminal shade of the forewing is weak — in the type form (Angola) scarcely indicated. *indigna.*

O. prosciodes *Prout* (15 i). Close to *indigna* but somewhat larger, the first two subcostals separate instead of (short-) stalked, the postmedian of the hindwing rather more excurved. Variable, the colouring generally darker; in the type form a broad dark costal area of the forewing is characteristic, but this is scarcely suggested in other forms. Belgian Congo (loc. typ.), Bihé (Angola) and I think Northern Rhodesia. *prosciodes.*

19. Genus: **Eulycia** *Janse.*

This genus, recently erected for the single species *grisea*, differs only from *Omphalucha* (in which I had placed it) in the narrower wings, obsolescence of the fovea and perhaps the slightly more prominent, more tufted face; palpus rather long-haired. In the ♂, subcostals 1 and 2 of the forewing are variable in their point of origin, sometimes connate, as Janse says, but oftener, in my experience, shortly stalked in the type form, in *g. apysta* generally well separate; in the ♀ coincident.

E. grisea *Warr.* (17 b). Larger and relatively narrower-winged than the similar species of *Omphalucha*, the irroration less dark and dense than in *crenulata*, so that the general tone remains grey, the brown band outside the postmedian commonly rather distinct and bright. Pectinations in the ♂ about 4 times diameter of shaft. The larva feeds on Combretum gueinzii. Warren founded his species on a ♀ from Nyasaland, with which are united the forms from N. W. Rhodesia, Transvaal and Natal. — **apysta** *subsp. nov.* (17 b) is a problematical local form from S. Rhodesia (Bulawayo and Wankie). ♂ 35 to nearly 40 mm, ♀ 42 mm. Colder grey, inclining to drab, in some specimens darker; the ♂♂ without the reddish outer shade, the one ♀ showing it, but not intensely; lines very fine, the postmedian of the forewing without subcostal indentation, commonly oblique outward in its anterior part, its inward (posterior) curve nearly always ceasing just behind 2nd median (in *grisea* continuing to 2nd submedian). Postmedian of hindwing continued to costa (in *grisea* ♂♂ obsolete anteriorly). Type in the Transvaal Museum, a ♂ from Wankie. Perhaps a separate species, but a full revision is not possible without Nyasa and Kenya ♂♂. — **eugonia** *subsp. nov.* (15 f), from Kenya Colony, is considerably smaller than *g. grisea* (♀ 34—40 mm) and has the angulation of the postmedian line very acute. Type and numerous other ♀♀ from Kibwezi, in the Tring Museum; also known from Voi and a few other localities. *grisea. apysta. eugonia.*

20. Genus: **Pachypalpia** *Warr*

Palpus rather long, 2nd joint with a strong triangular tuft above. Tongue vestigial. Antenna of ♂ much as in *Omphalucha*. Vestiture not particularly hairy. Hindtibia of ♂ with a hair-pencil; all the spurs

present. Wings elongate, but with the cell of the forewing very little over ½; 1st and 2nd subcostal of forewing coincident, sometimes with connections or anastomoses with the neighbouring veins. Only one species.

subalbata. **P. subalbata** *Warr.* (16 h). In pattern somewhat similar to *Omphalucha brunnea*, but much paler, the forewing without dark border, the hindwing and especially the underside whitish, etc. Abyssinia and Somaliland to Tanganyika Territory, besides Uganda: founded on a pair from the Luitpold Mountains.

21. Genus: **Exeliopsis** *gen. nov.*

I have for several years past been using this manuscript name of Warren's for a few species which I cannot satisfactorily refer to any known genus. I diagnosed it as follows. Face sloping, tufted below. Palpus shortish, 2nd joint heavily scaled, especially beneath. Tongue slight. Antenna in ♂ bipectinate to at least ¾ with long branches; in ♀ with shorter branches. Breast hairy. Hindtibia with terminal spurs only, or in addition with mere vestiges of one proximal or of both. Ovipositor in ♀ long. Forewing very long and narrow, termen extremely oblique, tonus weak; fovea present in ♂; cell well over ½; 1st and 2rd subcostals in ♂ short-stalked, in ♀ separating near costa (probably sometimes coincident throughout), 5th subcostal long-stalked, 2nd radial slightly behind middle of discocellulars. Hindwing rather narrow, costa elongate, apex rounded, termen waved or weakly subcrenulate; cell well over ½; venation about as in *Eulycia*. Genotype: *ansorgei Warr.*, 1905 (described as *Exelis*). Probably related to *Hyposidra*, but differing in the slight tongue, short palpus and atrophy of proximal spurs of hindtibia; possibly derived from *Eulycia*, which has the proximal spurs developed, though shorter than the terminal, and has much more hairy clothing.

perse. **E. perse** *Fawcett* (15 c). More brightly coloured than the other species, the warm brown bands and especially the cell-spot and postmedian of the hindwing recalling some *Omphalucha* or *Eulycia*. The hindleg sometimes retains vestiges of the proximal spurs, so that it may be an actual intergradation. The pectinations of the ♀ antenna are slenderly attached to the shaft and easily lost. Kenya Colony, the type from Kedai.

ansorgei. **E. ansorgei** *Warr.* (15 b), described from Southern Nigeria and known from Ivory Coast and from Belgian Congo as far as Kivu, is a dingy species with simple pattern of cell-spot and two lines, reproduced on the underside, sometimes made a little more distinct by pale edging. The extremely oblique termen of the forewing, "passing (as Warren says) into inner margin without forming a distinct anal angle", is distinctive. Ivory Coast to Kivu, the type from S. Nigeria.

amygdala. **E. amygdala** *sp. n.* (15 a). Structure nearly as in *ansorgei* but the antennal pectinations of the ♂ longer still, the ♀ not pectinate. ♂ 30 mm, ♀ 36—41 mm. Forewing with costa and termen slightly more curved, hindwing much longer and narrower. Colouring of ♀ almost exactly as in *Eulycia grisea*, the transverse markings much less irregular, weaker. The only known ♂, structurally sound and therefore made holotype, is not perfectly fresh, but certainly more unicolourous greyish. Senegal: Sédhiou (H. Castell), type and allotype in the Tring Museum; South Kavirondo: Suna (W. Feather), 2 ♀♀; thus evidently much overlooked hitherto.

insulanus. **E. insulanus** *sp. n.* (15 a). Palpus a little stronger than in *amygdala*; pectinations exceptionally long. Forewing with costa scarcely at all curved till beyond middle, but not conspicuously different in shape from that of *amygdala*; cell-dot on the upperside faint, the fine lines rather distinct, especially the postmedian, a median generally discernible, though weak. Hindwing paler, with the cell-mark and the hinder part of the postmedian line strong, but without conspicuous dark suffusion at anal angle. Both wings beneath with distinct cell-dot, the lines weak except at costa of forewing. S. Madagascar: Behara, forest of Didierea and Alluaudia, type ♂ and two others; Tongobory and Besaha, 1 ♂; all in the Tring Museum, from R. Catala. Superficially like a miniature *Eulycia grisea*, with an expanse of 28—34 mm; but with a less extremely bent postmedian line and structurally distinct in the 2-spurred hindtibia, etc.

22. Genus: **Biclavigera** *Warr.*

A peculiar genus but, according to the investigations of Janse, rather near to the following and, through it, to *Isturgia*. Face broad, rounded. Palpus very short. Tongue vestigial. Antenna of ♂ bipectinate to the apex, with very long branches. Foretibia as a rule with a short and slender anterior claw or spine. Hindtibia with terminal spurs only. Forewing long and narrow, the cell long, rather far forward, the subcostals somewhat crowded, the first two coincident. Hindwing also elongate, with cell well over ½. Warren named the genus from the tarsal claws, but I cannot see anything remarkable about these. ♀ unknown, perhaps apterous. Exclusively South African.

deterior. **B. deterior** *Prout* (18 a). Smaller than the genotype *(praecanaria)*; coloration in general more uniform, the pale parts almost obliterated, the fuscous irroration slight; the veins, which in *praecanaria* are buff to red-

dish ochreous, are here whitish ochreous, dark-dotted; postmedian line much straighter and not lunulate, on the veins marked with fuscous dashes. Cape Colony.

B. praecanaria *H.-Sch.* (18 a). Recognizable not only by the still more oblique, more sinuous and lunulate postmedian but especially by the whitish band which bounds it distally. Very variable in the relative strength of the different lines, the distance which separates them and even the degree of the slant of the postmedian. Capo Colony. — ab. **subinterrupta** *nov.* has the postmedian so proximally placed and so weak that the white band beyond it interrupts the central area at its narrowest part (region of the fold); from the 2nd submedian to the hindmargin the median area reappears as a blackish spot of about 1 mm diameter. Willowmore (G. v. Son), among a very variable series. — **rufivena** *Warr.* (18 b). Rather small (? narrower-winged) and brownish, the veins rather bright, postmedian rather more strongly dentate, its white bordering broad. Orange Free State (type), Murraysburg, etc.; possibly a subspecies but, in view of the great variability of the species, probably a mere aberration. *praecanaria. subinterrupta rufivena.*

B. fontis *sp. n.* (15 g). Very similar in colour and markings to *deterior*, yet structurally so different that it might almost be accorded a separate genus. Palpus somewhat less short. Pectinations rather less extremely long. Foretibia without the spine. Abdomen somewhat more robust. Wings less extremely elongate, tone somewhat browner, markings of forewing appreciably less oblique; fringes distinctly chequered. Cape Colony: Deelfontein, 2 ♂♂ in the British Museum. Perhaps a link with *Orgyiodes*. *fontis.*

B. uloprora *sp. n.* (16 e) may be regarded as another interesting link with *Orgyiodes*, towards which it makes some further approach in the predominantly ochreous colouring. Palpus extending considerably beyond frons and clothed beneath with long projecting hair. Foretibia without spine. Wing-shape, venation and pattern quite typical; forewing more speckled and with broader white stripes bounding the median area; hindwing feebly marked, excepting the cell-spot; fringes sharply chequered. "Natal", a fine ♂ in the British Museum, from the Adams collection. *uloprora.*

23. Genus: **Orgyiodes** *Warr.*

Differs from *Biclavigera* in the smaller eye, longhaired palpus and absence of foretibial claw, as well as in the shape and pattern. Antenna of ♂ not pectinate quite to apex. Wings (especially the hindwing) less elongate, cell of hindwing only about ½, costal vein approximated to it for a shorter distance. Only one species known.

O. caparia *Walk.* (= capicolaria *Feld.*) (16 h). A small species, of a reddish brown colour, with the hindwing and underside very feebly marked. Apparently confined to Cape Colony. *caparia.*

24. Genus: **Isturgia** *Hbn.*

(See vol. 4, p. 317.)

To this Holarctic genus is referred provisionally one South African species. It was described as a *Eurranthis* (synonym of *Fidonia*), but agrees more nearly with *Isturgia* as at present characterized, though probably requiring a separate genus. Face somewhat protuberant. Tongue present. Palpus better developed than in the two preceding, long-scaled beneath, but without the hairiness of true *Isturgia*. Antennal pectinations moderately long. Hindtibia with all spurs. Neither cell elongate. Forewing in the ♂ with a fovea; the coincident subcostal anastomosing successively with costal and 4th—5th subcostal.

I. focularia *Hb.-Gey.* (16 h). Evidently a day-flier, recognizable at once by its orange, sharply marked hindwing and underside. It belongs chiefly to Cape Colony but is recorded also from Bloemfontein. There is apparently a succession of broods. *focularia.*

25. Genus: **Aëtheometra** *Prout.*

Affinities quite uncertain, though I have suspected there may be some possible connection with the Palaearctic *Atomorpha* (Vol. 4, p. 396). Face protuberant. Tongue vestigial. Palpus very short and slender. Antenna of ♂ pectinate to about ⅔, with rather long, rather lax branches. Foretibia without claw; hindtibia with all spurs. Abdomen moderately robust. Forewing with a slight fovea; cell well over ½; 1st subcostal anastomosing with costal, 2nd from cell. Hindwing with costal anastomosing with cell to about ⅓, 2nd subcostal shortly stalked. Type: *iconoclasis Prout.*

A. iconoclasis *Prout* (15 i). Recognizable by the curiously shaped lines of the forewing, which, with the aid of the cell-spot, may be likened to a crudely shaped and damaged bust in profile. Both wings beneath *iconoclasis.*

with a fairly strong and thick postmedian line, the forewing otherwise paler and more weakly marked than above. Buran, British Somaliland, 3000 feet, only the type ♂ known.

26. Genus: **Buzura** *Walk.*

(See Vol. 4, p. 359.)

Face and the rather short palpus with dense scaling. Tongue short. Antenna of ♂ bipectinate, with moderate or (in the African species) long branches. Breast densely hairy. Hindtibia with all spurs. Forewing elongate; fovea wanting; cell fully ½ in its shortest part, more or less produced anteriorly; 1st and 2nd subcostal shortly stalked. Hindwing not elongate; termen somewhat crenulate; cell generally over ½, in some ♀♀ about ½. Rather large and robust moths. The type is the Indian species *suppressaria Guen.* and the genus (sens. str.) extends eastward to the Sunda Islands. The African species which have hitherto been referred to it are presumably offshoots of the *Alcis* group of genera and will probably not be allowed to remain here, notwithstanding their shape and facies; tongue, presence of fovea and hindtibial hair-pencil in the ♂, nearly glabrous legs and reduced length of cell, all speak for this change.

abruptaria. **B. abruptaria** *Walk.* (15 i). Investigations on the genitalia of the African "*Buzura*" in the British Museum, kindly undertaken by Mr. A. H. Stringer at my instigation, have shown that we have several closely allied species or, at the least, remarkably well differentiated local forms, confused under the general conception of *abruptaria*. The original, described from a Congo ♂, is probably the only widely distributed one and occurs from French Guinea and Sierra Leone to the Cameroons and Uganda. The irroration on the white ground-colour in the ♂ (here figured) is slight or moderate and there is nearly always an almost clean (non-irrorated) outer patch, interrupting the postmedian markings about cellule 3. Underside similar to upper. — **maculatissimus** *Grünberg* (15 h), founded on a large ♀ (forewing length 34 mm) from the Sesse Islands, is either the regular ♀ to *abruptaria* or something very closely akin. All the ♀♀ of the group are extremely alike and I have not yet learned how to distinguish some of them; but 3 ♀♀ from Toro, Uganda, collected with almost typical *abruptaria* ♂♂, fit Grünberg's careful description perfectly, except in their rather less large size; we figure one of them.

maculatissimus.

johannaria. **B. johannaria** *Oberth.* (15 h), though also from the Cameroons (Johann-Albrechts-Höhe), can hardly be, as I at first supposed, a mere mountain form of *abruptaria* with increased and more regularly distributed irroration and some reduction of the spots which accompany the two principal lines; the genitalia show some differences, though slight, the most noticeable being in the saccus, which is more produced to a point than in any of the allies. Cell-spots less small, the yellow lines, though slender, well developed. 2 ♂♂.

mpalaria. **B. mpalaria** *Oberth.* (16 a) was unfortunately founded on a ♀ (from M'pala, W. of Lake Tanganyika) and it is not yet possible to associate it definitely with any particular ♂ form. I was formerly inclined to apply the name to the following species, from much further north, and still consider this a quite possible union; but I have concluded that it is better to give new names to both its nearest neighbours (from Lowa district and Nyasa) than to risk the confusion resultant on attaching it to the wrong one. Underside closely like upper. No further specimens known.

aequinoctialis. **B. aequinoctialis** *sp. n.* (16 a). Forewing 24—26 mm. Face fuscous, with the upper part pale (white and yellow, variable in extent). Irroration no heavier than in average *abruptaria*, but the dark markings on an average heavier, so that the insect looks on the whole more contrastingly marked; variable in detail, sometimes with conspicuous cell-marks (lunulate, at least on the hindwing), present also beneath, generally with the last group of spots outside the postmedian (namely from 1st median hindward), sometimes also with the corresponding group of antemedian, rather heavy on the forewing, subterminal and terminal dark spots between the radials inclined to consolidate into a quadrate blotch; the composite costal subterminal spot of the forewing in all the known examples larger than in most *abruptaria*. Median line of hindwing shown in only one known example; in this it is rather stronger than in the following species, but only developed in the anterior half. Genitalia long and narrow, the inner margin of the valve without the concavity of that of *johannaria*, the central lip of the gnathos not so full and rounded as in that and *abruptaria*, but inclined to be pointed at apex. Upper Belgian Congo: Upper Lowa Valley, near Masisi, 5000—6000 feet, type ♂ and another; Middle Lowa Valley, near Walikali, 3000—4000 feet, 1 ♂; Bafwasendi, Lindi River, 2000 feet, 1 ♂; all collected for Mr. Joicey by T. A. Barns.

stringeri. **B. stringeri** *sp. n.* (16 a). Face predominantly white mixed with yellow. Antennal pectinations continuing to about 40 joints (in *abruptaria*, etc., to about 35). Length of forewing in ♂ 22 to over 26 mm, in ♀ variable from 26 to 39 mm. Easily known by its heavy irroration, even in the ♂♂; median shade, at least of the hindwing, present in all, both above and beneath, though rather vague in places. Sides of saccus more oblique than in *aequinoctialis*, uncus differently shaped, spinules on costa of valve perhaps less long and less

dense, etc. Nyasaland in the Zomba district (H. Barlow), 3 ♂♂ and 4 ♀♀ from the Joicey Collection, the type from Zomba Plateau, November 1920.

B. edwardsi *sp. n.* (16 a). In size and shape near *stringeri*. Face more uniformly suffused with yellow. *edwardsi.* Antennal pectinations about as in *abruptaria*, etc. Abdomen with yellow belts at the ends of the segments. Wings with the irroration very coarse in places, but irregularly distributed; the black lines and spots mostly heavy, the antemedian not interrupted, the median well developed, that of the hindwing very angular; all the lines, except the last-named, accompanied by b r i g h t y e l l o w l i n e s; fringe yellow, sharply black-spotted. Uganda: Namwamba Valley, Ruwenzori Range, 6500 feet (Dr. F. W. Edwards, British Museum E. African Expedition), type ♂; Bwamba Pass, 6500 feet (Prof. G. D. Hale Carpenter), 1 ♂.

B. antecreta *sp. n.* (16 a). ♂, 42—44 mm. Smaller than *abruptaria*, among which it has been detected *antecreta.* in a few W. African localities; much more weakly marked. Wing-shape slightly intermediate towards that of the following; irroration mostly very fine, but fairly distributed; only the 3 black costal spots (omitting a subterminal) conspicuous, the lines being very slender, the accompanying dots and spots slight and incomplete; terminal spots obsolescent. Old Calabar (S. D. Crompton) type ♂ in the British Museum. Single ♂♂ also known to me from Lagos, from Ilesha and from Kumasi. The genitalia of the ♂ are shorter than in either of the preceding, making some approach to those of *pteronyma;* the saccus, however, is quite different, being produced to a definite point; spinules on the valves are much more dense.

B. pteronyma *sp. n.* (16 b) approaches *antecreta* in its small size (♂ 43—45 mm, 1 giant 50 mm. 1 dwarf *pteronyma.* 36; ♀ 47—55 mm) and weak markings. The blackish face has a much narrower upper part yellow or whitish, but an increased (typically subtriangular) white spot below. Wings much more strongly and coarsely irrorated with brownish grey, the costal spots as in *antecreta*, the 4th (subterminal), if present, nearly always weak or broken, the lines and spots also weakened, but less extremely than in that species, the antemedian in particular not so slender. Genitalia of the ♂ decidedly smaller than in most *Buzura*, n e a r l y a s b r o a d a s l o n g, valve with dorsal edge more nearly equal in length to ventral and lacking the long spines from base which are found in all the other examined species; uncus not (as in the others) strongly bifid at the tip. Kenya Colony: Kibwezi (W. Feather), a long series in the Tring Museum, besides one or two from other adjacent localities. — ab. **fumata** *nov.*, occasional among the type form, is melanochroic, the irroration having overspread the *fumata.* entire surface of the wings.

B. subocularia *Mab.* (= analiplaga *Warr.*) (16 b). Easily distinguished from all the preceding, apart *subocularia.* from slight differences in shape, and in the course of the lines, by the dark subterminal clouding of the forewing behind the 3rd radial, closely approaching an inward curve of the postmedian, and by the pair of large black spots at the base of the abdomen above. Antenna with 3 or 4 less joints pectinated. Gold Coast to Belgian Congo; Mabille's type was merely given as from "W. Africa", Warren's was from Nigeria.

B. homoclera *sp. n.* (16 b) differs from all the rest in the relatively more elongate costa of the hind- *homoclera.* wing, but the blurred pattern of the wings somewhat recalls some forms of *pteronyma*. Abdomen as robust as in ♀ *pteronyma*, but tapering behind. Palpus and tongue slight. Pectinations moderate, stiff, continuing to nearer the tip of the antenna than in the *abruptaria* group. Face fuscous, rather narrowly buff below. Abdomen more strongly dark-belted beneath than above. Hindtibia dilated, terminal spurs short. Forewing with the 1st radial stalked (though shortly) with the 3rd—5th subcostal; antemedian and median bands, a dark cell-spot and a pair of outer spots (before and behind the 3rd radial) indicated though not sharply defined; termen, especially at vein-ends strongly tinged with buff; fringe alternately darker and lighter. Hindwing with less dense strigulation, except distally, and with 3 distinct lines; termen and fringe as on forewing. Underside similar. Tanganyika Territory: Lindi. A ♂ in Zool. Mus. Berlin. It bears some superficial resemblance to a *Rhodophthitus*.

27. Genus: **Cerurographa** *Janse.*

"Proboscis rather weak; palpus minute, fringed with long scales; frons rounded; antenna bipectinate in ♂ for about two-thirds, pectination about 7 times shaft; legs heavily scaled, mid- and hindtibia fringed with long scales and hairs; hindtibia with 4 short spurs, without hair pencil." Forewing with all veins, 1st and 2nd subcostal free but closely approximated; a small fovea. Hindwing with costa relatively rather short, termen straightish from 2nd subcostal to a slight bend about the 1st median. ♂ genitalia: uncus incurved at base, well curved downwards and ending in a fine point; gnathos rather narrow, elbowed at middle; valve tapering, its apex bluntly rounded, costa curved, well chitinized and, together with apex, covered with fairly long bristles; lower margin folded over, provided at base with a rounded patch which bears dense strong spines; vesica with a patch of many stout, long cornuti (Janse). Established for a single species; probably some of my *Colocleora* (e. g. *spuria* and *faceta*) may belong to it, but as its author depended largely upon the genitalia I have preferred not to place them with it until they have been studied from that standpoint.

bistonica. **C. bistonica** *Prout.* Expanse 37 mm. Face black, with the upper part creamy white. Wings white, the forewing with the two principal lines sharply black, accompanied on their reverse sides by irregular brownish shades; median line arising from a thick, angular mark on costa, running outward to approach the postmedian but mostly slender and weak. Hindwing weaker marked, but with the postmedian becoming strong behind 2nd median, thence oblique outward, and an oblique black proximal-subterminal mark at tornus. Only the type ♂ known, taken near Eshowe (Zululand) in January 1916. Somewhat suggestive of a *Biston*.

28. Genus: **Colocleora** *gen. nov.*

I have for a good many years used this "provisional" name for a number of African forms which cannot satisfactorily be contained in *Cleora* or *Alcis* nor in any of the more Bistonine genera. Perhaps some of them may have affinities with *Cerurographa* (see above), one *(faceta)* I ventured to describe in that genus, while a few form a part of the *Racotis* of Janse (not *Racotis Moore,* sens. str.). Build robust. Face not protuberant, scaling dense, moderately appressed. Palpus short or shortish, densely scaled; 3rd joint partially concealed. Tongue short. Antenna short, in ♂ with long pectinations, a moderate or short apical part simple (but see *polyplanes*). Breast densely hairy. Femora hairy; foretibia generally, at least in the ♂, hairy or densely tufted. Forewing with termen waved or nearly smooth, oblique; fovea usually present; cell ½ or rather less, generally more or less produced anteriorly, discocellulars incurved, typically rather deeply so at cell-fold; 1st and 2nd subcostal free or shortly stalked (in the ♀♀ generally long-stalked, in those of a few species coincident), 2nd radial arising before the bend of the discocellulars. Hindwing with costa not elongate (generally rather short), termen waved or crenulate (in a few ♀♀ deeply crenulate), cell never very short, 2nd radial wanting, occasionally showing vestiges proximally. Type of the genus: *Colocleora ansorgei* (= *Alcis ansorgei Warr.*). Seems to stand near the common base of the *Cleora* and *Hyposidra* groups, agreeing with the former (or approaching the *Biston* group) in shape and facies, but with the short antenna and an approach to the venational conditions of *Hyposidra.* I only recognize it as African.

polyplanes. **C. polyplanes** *sp. nov.* (16 b). Expanse 42 mm. Head rough-haired. Anomalous in having the tongue stouter, the antenna dentate, each joint with 2 pairs of rather long, slender fascicles and in lacking the fovea. Probably it will need a separate genus. Forewing with termen very gently curved, strongly oblique; 1st and 2nd subcostals free; white, the costal margin and veins tinged with buff; blackish irroration mostly dense; cell-mark surrounded by dark suffusion; the course of the dentate black postmedian line and the dark fuscous proximal shades of the subterminal characteristic. Hindwing rather short, much as in the African "*Buzura*", much whiter than the forewing, weakly marked. Lake Kivu: Rugege Forest, Ruanda district, 7000 feet, December 1921 (T. A. Barns), only the type ♂ known.

spuria. **C. spuria** *Prout* (16 c). Foretibia of ♂ hairy. Fovea of ♂ stronger than usual. Colours nearly as in *divisaria*, their distribution, as well as the wing-shape, quite different. Lines of the forewing weak posteriorly, the cinnamon or slightly rufous colour generally running from basal patch along costal margin and broadening distally (about to the 1st radial). French Guinea to Kivu and Uganda. — f. (? sp. div.) **leucostephana** *nov.* agrees in structure and in the hindwing, but has the vertex white, the forewing with basal and median areas and an extension for a few mm beyond (with a sharp angulation at 1st median) almost completely occupied by a grey-brown cloud. Gold Coast: Bibianaha, 700 feet, type ♂ in the British Museum; a similar ♂ from Mabera Forest.

leucostephana.

faceta. **C. faceta** *Prout* (16 c). Forewing shaped nearly as in *Cerurographa bistonica*, with which it may well be congeneric (see above), hindwing fuller and with more rounded termen. Forewing with 1st and 2nd subcostals just stalked; markings macular or cloudy, the antemedian outwardly oblique, the median sinuous, with strong cloudings; cell-spots present, that of the forewing indefinite, ocellated. National Park, Natal, the type ♂ unique.

collenettei. **C. collenettei** *sp. n.* (16 c). Foretibia not hairy, other characters of *Colocleora*. Palpus short, 2nd joint with projecting scales beneath. Antennal pectinations decreasing moderately rapidly towards the dentate, non-pectinate apical 12 joints; abdomen with narrow dorsal ridge or series of dots of a light cinnamon-buff. Forewing shape altogether recalling some of the *Biston* group; 1st and 2nd subcostals well separate; fovea strong, circular; the coloration, especially the bright cinamon, tawny-mixed distal area, very distinctive. Hindwing with termen crenulate. Underside similar to upper; forewing white behind 2nd submedian. Near Macenta, French Guinea, 1600 feet: Massadou, type and paratype; Soundedou, 1 ♂; collected 13—17 May 1926 for the late Mr. Joicey by Mr. C. L. Collenette. A striking species, belonging to the more *Hyposidra*-like element of *Colocleora*.

bellula. **C. bellula** *sp. n.* (16 c). A small species, expanding scarcely 32 mm. Legs not tufted nor fringed, but the short palpus, atrophied tongue, long cell of the forewing and other characters place it here. Forewing with

1st and 2nd subcostals very shortly stalked; hindwing with costal closely approximated to subcostal almost to the middle of the cell. The large black cell-spot, crossed on the forewing by the strongly sinuous median shade, and the thick, dentate black lines (finely white-edged on their reverse sidis) which bound the grey median area, the postmedian shaped somewhat as in *iconoclasis*, are quite striking. Chinkolobwe (Haut Katanga), 13 October 1931, type ♂ in the collection of Dr. J. Romieux.

C. ansorgei *Warr.* (16 c), which may probably have to sink to *monogrammaria*, has some near resem- *ansorgei.*
blance to *divisaria*, but the black markings more intense, the antemedian less curved, the brown shades less cinnamon and less extended, the cell-mark of the forewing generally longer, angular, the postmedian with its angle rounded off; there are also, especially in the ♂, appreciable distinctions in the shape. Nigeria to Uganda, the type from the Congo. — **tichomeca** *subsp. nov.* is larger (♂ 52 mm), termen more oblique, black markings *tichomeca.*
(including the cell-spot) broad. A fine ♂ from São Thomé, January 1926 (T. A. Barns, now in the British Museum collection.

C. catalai *sp. n.* (17 b). Abdomen less elongate than in *monogrammaria*, which species it resembles in *catalai.*
coloration and markings; wings a trifle broader. Forewing with 1st and 2nd subcostals shortly stalked, 3rd discocellular not deeply angled; antemedian curving inward anteriorly, its duplicating line rather strong; very characteristic (but perhaps inconstant, compare *spuria* and *leucostephana*) is the broad brown median band, which extends from the duplicating line of the antemedian to just beyond the postmedian. Hindwing with the postmedian line more curved about the radials than in *monogrammaria*; proximal shade of the subterminal not blackened near the tornus. Forêt d'Isaka, near Fort Dauphin, Madagascar (R. Catala). a ♂ in the Tring Museum.

C. monogrammaria *Mab.*, said to be from "Zambesi", is a large ♀ in poor condition, very much like *monogram-*
some Gold Coast ♀♀ of *ansorgei*, and the locality given is perhaps erroneous. If it really differs constantly from *maria.*
that, it may be in the less long cell-mark, the more *divisaria*-like tone of the brown shades and the weaker dark mark at the anal angle of the hindwing. Mabille's is the older name.

C. prona *sp. n.* (18 b). ♂, 40—42 mm. Like *ansorgei*, with almost the same structure and scheme of *prona.*
markings. Antennal pectinations apparently somewhat longer but ceasing a few joints earlier. Body and wings above brown (almost ochraceous-buff) instead of whitish, the markings of a rather warmer brown than in *ansorgei;* forewing with antemedian excurved anteriorly instead of almost straight. W. Kivu: Upper Lowa Valley, near Masisi, 5000—6000 feet and Middle Lowa Valley, near Walikali, 3000—4000 feet, 3 ♂♂ collected in forest country, February 1924, wet season (T. A. Barns)..

C. anisoscia *sp. n.* (16 d). 47—53 mm. Strongly recalls a large pale *ansorgei* except in the curved and *anisoscia.*
oblique antemedian line of the forewing the shape of the hindwing and some slight structural details; really nearer to *divisaria*, though very different in colour and without the long prong in the postmedian line. Palpus 1½, rather stout. Antenna less than ½ wing-length; pectinations long, blackish, apical ⅓ non-pectinate. Hindwing rather strongly crenulate, with a slightly stronger tooth at the 3rd radial. W. Kivu: 2 ♂♂ each from the same localities and dates as *prona* (16 d). I have since seen in the Congo Museum a ♀ from Kindu.

C. probola *sp. n.* (18 b). A small species, but structurally pretty typical. Palpus longer than diameter *probola.*
of eye. Fore- and midtibia fringed. Forewing with costa arched distally, termen fairly long; 1st and 2nd subcostals very shortly stalked; pale, with a tinge of pinkish buff, the lines slight, the dark basal patch bounded as in *ansorgei*, the other principal marking a red-brown, fuscous-mixed subapical patch, separated, by the whitish commencement of a subterminal, from a small streak or wedge close to apex. Hindwing rather small, with costal margin not longer than abdominal (compare *ansorgei*); markings slight. Underside similarly but more weakly marked, only the costal dots of hindwing strengthened. French Guinea: Soundedou, near Macenta, 1600 feet, 13 May 1926 (C. L. Collenette), type and paratype ♂. Also single ♂♂ from Bingerville, Bitje and Lake Victoria (Bunyako).

C. expansa *Warr.* (16 e) has the first two subcostals long-stalked, especially in the ♀, and is only assigned *expansa.*
temporarily to *Colocleora* in default of a better position; Warren described it, from a Nigerian ♀, as "Eubyja?", an even more unacceptable position. Excepting the short antenna and palpus, it shows little sign of the special characters of the present genus. Rather large, especially the ♀, the wings exceptionally broad and well rounded, with whitish ground-colour and weakly marked throughout, somewhat recalling a worn *pulverosa* (18 b). Distributed from Sierra Leone to Uganda, the but series yet obtained being from Bingerville. — **ken-** *kenyensis.*
yensis *subsp. nov.* More evenly irrorated, the cleaner white band between postmedian and subterminal almost obliterated; postmedian with the teeth blackened, its course on hindwing more strongly oblique to the hindmargin. Nairobi, only a few specimens yet known; the sule ♀ labelled Karura Forest; type ♂ in Mus. Tring.

C. sciabola *sp. n.* (16 d). Also unlike typical *Colocleora* in shape, the first two subcostals in both sexes *sciabola.*
moderately stalked, the fovea obsolescent, the ♂ hindtibia with a hair-pencil; head and foreleg more typically

Colocleora. Expanse 49—51 mm. Antenna of ♂ pectinate to just beyond $^2/_3$. Forewing with termen relatively shorter, hindwing with abdominal margin relatively less long, than in *expansa;* more clouded; markings olive drab, somewhat strengthened at costa, antemedian rather thick and blurred, partly confluent with the straightish, rather proximally placed median; postmedian strongly dentate; position of subterminal indicated by interrupted proximal maculation. Underside scarcely irrorated, the markings faint. Ruanda: Rugege district, 7000—8000 feet, December 1921 (T. A. Barns), a pair in the British Museum.

polysemna. **C. polysemna** *sp. n.* (16 d). In shape and structure near the preceding, hindwing slightly more dentate; foretibia more strongly tufted, 1st and 2nd subcostal longer-stalked, the stalk anastomosing with costal, 1st radial stalked with 3rd—5th subcostal; antenna pectinate to little beyond middle. A conspicuously lage species. Brown in varied hues, noticeably paler and more buff in the middle of the area between the postmedian line and subterminal shade; veins largely white, minutely dark-dotted; some irregular white patches; antemedian weak, the other lines indicated by minute dashes on the veins, the postmedian developing a V-mark on 1st radial. W. Kivu: Upper Lowa Valley, near Masisi, 5000—6000 feet, forest and long grass, February 1924 (T. A. Barns), the type ♂ only, ex coll. Joicey.

pulverosa. **C. pulverosa** *Warr.* (= contemptaria *Janse*, nec *Walk.*) (18 b). A species of quite uncertain affinities, but fitting less badly here than in *Hemerophila*, in which it has been placed. In coloration and pattern there is a marked superficial resemblance to the typical section of *Ectropis* (see Vol. 4, p. 376) except that the dark marks just outside the middle of the postmedian line are wanting; but, apart from the narrow valves, I can see little in common structurally. Palpus in the ♀ short, in the ♂ rather long — an usual sex-dimorphism which long hindered the correct determination of the latter, Warren having described from the larger, more weakly marked, more *expansa*-like ♀. Antenna of ♂ pectinate to near the tip, with very long branches. Tongue slight. Foretibia heavily clothed but not hairy. Fovea undeveloped; 1st and 2nd subcostals in the ♂ free, in the ♀ long-stalked. Described from Natal, where the larva feeds on Ochna atropurpurea. Known to me also from Nyasa, Tanganyika and Kenya.

suffumosa. **C. suffumosa** *sp. n.* ♂, 39 mm. Much darker than *pulverosa*, the wings being copiously and almost uniformly irrorated with dark-grey (tone perhaps of a not very extreme *Ectropis crepuscularia* ab. *delamerensis B.-White*, Vol. 4, p. 376). Palpus short. Pectinations not quite so extremely long as in *pulverosa*. Foretibia densely clothed, but with the hair appressed; midtibia rather more loosely haired (hindlegs lost, but clearly not dilated — no abdominal spine). Forewing with first two subcostals free; costa less rounded than in *pulverosa*, still more recalling *Ectropis*. Markings approximately as in *pulverosa;* postmedian rather firmer, slightly more incurved behind the middle; subterminal and its shading weaker. Underside somewhat less dark, not irrorated; cell-dots (spots) and postmedian present, not intense, the latter arising from a small costal spot. Angola: Gamba, Bihé, Dec. 1934 (R. Braun), a good ♂ in the Tring Museum.

perpectinata. **C. perpectinata** *sp. n.* (16 b). ♂, 34—40 mm (♀ unknown). Very much like *idiochroa Prout*, which, pending a more scientific revision, remains in *Boarmia* (sens. lat.) but is probably related. Palpus similar (well beyond diameter of eye, densely scaled), tongue probably a little more slender. Antenna with the pectinations, even of the inner series excessively long, leaving free at its apex less (in *idiochroa* more) than 1 mm. Coloration, without the reddish influence. Forewing with 1st and 2nd subcostals shortly stalked, lines more bent near costa, the postmedian oblique outward in crossing the 5th subcostal. Hindwing with median shade dentate outward about the median vein. Underside with subterminal maculation generally stronger than in *idiochroa*. The legs are nearly smooth-scaled, though fresh specimens show a little hair on the femora. Madagascar: Perinet, 149 km E. of Tananarivo (N. and G. Olsoufieff), a good series in Mus. Tring; Tananarivo, 3 (two of them large) (Coll. Dr. G. E. Audeoud); Ambinanindrano, W. of Mahonore, 3 rather small (Kestell-Cornish).

proximaria. **C. proximaria** *Walk.* (16 e). This and the following, though so closely related to one another that they might have been mistaken for subspecies, have an aspect apart from that of all others. Janse finds its genitalia not incompatible generically with those of *divisaria*, but it has not the hairy foreleg, while its more rounded, whitish wings more recall *pulverosa*. Face and palpus short. Antenna about as in *pulverosa*. Hindtibia without pencil. Cell long; fovea well developed. First two subcostals moderately stalked. The underside is rather striking: cell-spot on each wing roundish, sharply black; costa of forewing with a subapical blackish spot, the apex itself purer white than the rest of the wing. The type form, from Natal, is distributed locally from E. Griqua-
albescens. land to S. Rhodesia. Mr. E. E. Platt, of Durban, has bred it from larvae found on Albizzia and Acacia. — **albescens** *Prout*, from E. Africa (Kenya and probably Tanganyika) is considerably whiter and on an average smaller.

grisea. **C. grisea** *Janse* (18 a) has the transverse markings much stronger, the dots connected into lines, the median shade sometimes very heavy. Underside, in addition to the characteristic maculation of *proximaria*, with at least indications of the transverse lines or bands, particularly the subterminal. S. Rhodesia.

C. clarivenata *Prout* (16 d), described as a *Cleora*, is evidently another of the outliers of *Colocleora*, with the 1st and 2nd subcostal well stalked and the tibiae not hairy. Antennal pectinations reaching to near apex. Fovea present. Very distinct in the rather dark brown colour and yellowish white lines and veins. Upper Kasai River, 1 ♂. *clarivenata.*

C. indivisa *Prout* (18 b), from São Thomé, was separated from *divisaria* by the longer antenna, with about 42 joints pectinate, 10 not so, the pectinations themselves longer, and by the somewhat less deeply exangled postmedian of the forewing; hindwing and underside on an average rather darker than in *divisaria*. A variable series of 7 ♂♂ collected by Mr. Tams leads me to doubt whether it is more than, a race, antemedian on the whole less oblique, median indicated at least by dark vein-spots. *indivisa.*

C. divisaria *Walk.* (= acutangula *Warr.*) (16 e). Very variable in size and coloration, but generally easy to recognize by its shape, its well-differentiated pale (white or yellowish) median area and the strong outward projection of the postmedian. Structure about as in *monogrammaria*, from which it is best distinguished by the postmedian line and most of the other characters mentioned above under *ansorgei*. The larva, according to Platt, feeds on Royena villosa and Combretum gueinzii. Blown larvae from G. F. Leigh (Congella) — probably correct though he was not always reliable — recall the typical section of *Ectropis* but are somewhat more elongate; face rather flat; body with a slight ridge dorsally and a pair of small humps on the 6th abdominal. Natal (loc. typ.) Zululand and Transvaal. — ab. **crassilineata** *Prout*, founded on a ♂ from Barberton and a ♀ from Durban, is distinguished by the intensification of the black lines throughout. — **acygonia** *Hmps.*, a ♂ from Bangueolo district, N. E. Rhodesia, is probably also a mere aberration, the colour contrasts not very strong, the postmedian line complete but not thickened, on bot wings with the angle very acute. — **separataria** *Möschl.* (= basilaria *Mab.*, rufilimes *Warr.*) (16 e). I am not sure whether the forms of *divisaria* from Tropical Africa (Gambia to Cameroons and even Kenya) are separable inter se, or indeed whether they are always separable from the Natal race, but if they are, the above names are available for the West African (Gold Coast, Assinie and Warri respectively). On an average they are less large than the typical form, sometimes much smaller. — **chresima** *subsp. nov.* ♂ 44—47 mm, ♀ 54 mm. Very distinct in coloration, entirely lacking the red-brown shades; the pale parts with weak brown suffusion, basal area of forewing and both distal areas with the irroration and suffusion olive-grey, strongest in the ♂♂; midcostal spot in the ♂♂ large; hindwing with the angle of the postmedian line not acute. Angola: Amboim district (Dr. K. Jordan): Quirimbo, 75 km. E. of P. Amboim, 300 m, 2 ♂♂; Fazenda Congulu, 700—800 m, 1 ♀. *divisaria. crassilineata. acygonia. separataria. chresima.*

C. melancheima *sp. n.* (18 c). At first sight very like a small (37—38 mm) *divisaria*, with sharp colour contrasts; structure agreeing essentially, except that the first two subcostals of the forewing are well separate at their origin. Wings purer white but (at least in the type form) with more copious irroration and with indications of a dark streak or longitudinal suffusion in the median area and extending beyond the postmedian; a weak reniform cell-mark outlined; median area narrow, the antemedian more bent inward near costa and angled outward near the cell-mark, the postmedian much less angled than in *divisaria*. Hindwing with cell-mark striguliform, conspicuous, postmedian complete, crenulate, not particularly irregular. Ivory Coast: Bingerville (G. Melou), type ♂ in Tring Museum, paratype in British Museum. Also a somewhat less irrorated ♂ from Old Calabar in the latter collection. *melancheima.*

C. hegemonica *Prout* (18 c). Palpus shorter than in *divisaria*, tongue present, though rather short and very slender; structure otherwise similar to that of *divisaria*, which it also somewhat approaches in size and design. I suspect, however, that it may be nearer to *simulatrix*. Ruwenzori. *hegemonica.*

C. burgeoni *Prout*, from W. Ruwenzori (Kalonge, 1 ♂), is probably nearest to *hegemonica* (18 c), the underside — as in that species, but not in *simulatrix* — strongly marked. Smaller (45 mm), less broad-winged, warmer brown, the outward angle in the postmedian further weakened on both wings, on the forewing forming a moderate curve, on the hindwing a scarcely perceptible one. Femora hairy; foretibia strongly tufted, nidtibia somewhat hairy. *burgeoni.*

C. opisthommata *sp. n.* (16 f). Expanse 40—50 mm. Palpus short. Forecoxa heavily clothed in front, tibia not exceptionally clothed; femora somewhat hairy. First two subcostals of forewing moderately stalked. Scheme of colouring much as in *divisaria*, but the shape, the cleaner whiteness of the ground-colour and the sharpness of the cinnamon outer band give somewhat the impression of a gay *Neocleora* and this is enhanced by the presence of a large, slightly or moderately white-pupilled or grey-pupilled cell-spot on the hindwing. Underside irregularly strigulated and suffused with grey, the cell-spots strong, the postmedian line discernible. Perinet, E. of Tananarivo (N. and G. Olsoufieff), 6 ♂♂ in the Tring Museum. *opisthommata.*

C. disgrega *sp. n.* In structure closer to *divisaria* (16 e) but with 1st and 2nd subcostal well free; antenna rather less short, pectinate nearly to apex. Expanse 45 mm. Forewing with apex and termen more rounded. *disgrega.*

hindwing with costa somewhat more elongate, termen not crenulate, its posterior part scarcely even undulate. Basal area of forewing and outer band of both wings brown, mixed with blackish, not cinnamon; antemedian of forewing from hindmargin to cell-fold as in *divisaria*, here bent and forming an inward curve to the costal spot, which is 5 mm from the base; postmedian of forewing at both ends a little over 5 mm from termen, only very weakly curved to the very obtuse angle at 3rd radial, from thence to 2nd submedian forming an extremely shallow sinus and not dentate; median line faint on forewing, on hindwing more concise and straighter than in *divisaria;* postmedian of hindwing black, very near the small black cell-dot, less irregular than in any *divisaria;* an irregular pale subterminal indicated on both wings, in places (especially at hindmargin of hindwing) with dark shading proximally. Underside uniform brown-grey, both wings with cell-dot and little-curved postmedian line, which is dark-marked at the veins. Diego Suarez (G. Melou), 1 ♂ in the Tring Museum.

bipannosa. **C. bipannosa** *sp. n.* (16 f). ♂ 44 mm, ♀ 50 mm. Palpus short. Pectinations very long, continuing to beyond $^4/_5$ shaft. Forelegs lost in the ♂; hindtibia not dilated. Upperside of the ♂ with nearly the colours of *cinnamomoneura*, the shape and pattern different, the veins not cinnamon; of the ♀ somewhat duller (greyer). Forewing with the 1st and 2nd subcostal separate in the ♂, long-stalked in the ♀; median shade weak; lines arising from small black costal spots; postmedian with sharp black teeth outward; subterminal distinctive, showing not only the cinnamon-tinged patch of the *simulatrix* group but also a central white one. Underside of forewing still more distinctive, with strong cell-mark and (less irregular) postmedian and with dark terminal shading, especially anteriorly, which leaves free a conspicuous whitish apical spot and a pale patch in cellule 3. Nyasaland: Zomba, March 1922 (H. Barlow), the type ♂; Mt. Mlanje, 21 April 1913 (S. A. Neave), 1 ♀, worn. Both are in the British Museum, together with a good ♀ from Mwengwa, N. W. Rhodesia, 20 September 1913 (H. C. Dollman).

dollmani. **C. dollmani** *sp. n.* (16 f). Misled by the similarity of its colouring to that of the last-mentioned ♀♀, formerly supposed this to be a remarkable aberration. Wings less broad, cell-marks smaller, postmedian on neither wing bent outward at 1st radial, no trace shown of a cinnamon subapical spot. Underside much simpler, white-grey, with reniform grey irroration, only the cell-marks and somewhat macular postmedian present, the latter with stronger black costal spots. Foretibia hairy. Forewing with 1st and 2nd subcostals short-stalked, not separate. N. W. Rhodesia: Solwezi, October 1917 (H. C. Dollman), a ♂ in the British Museum.

cinnamomoneura. **C. cinnamomoneura** *sp. n.* (16 h). Closely similar to *simulatrix*, possibly a race of it, but with the postmedian line on both wings less bent. Expanse 40—42 mm. Forewing much darker than in normal *simulatrix* (grey, between neutral grey and deep plumbeous), the veins mostly pinkish cinnamon dotted with black; hindwing also partly dark, but more suffused with pale cinnamon as far as the postmedian line. (A similarly darkened ♀ *simulatrix*, from Bingerville, is, however known to me). Underside paler, the forewing with a tinge of plumbeous grey, the hindwing with a tinge of buff; markings weak, except the cell-spots; postmedians indicated by vein-dots. Marungu Plateau (W. side), S. W. of Tanganyika; 7000 feet, February 1922, type ♂; Ruanda District, Lake Kivu: Rugege Forest, 7000 feet, December 1921, a smaller ♂; both collected by Mr. T. A. Barns (Joicey Collection).

simulatrix. **C. simulatrix** *Warr.* (♀ = ochriplaga *Prout*) (16 f). Characters pretty closely as given in the generic diagnosis, the tongue fairly robust, though short, the distal margins in the ♀ markedly crenulate, especially on the hindwing. 1st and 2nd subcostals free in the ♂, long-stalked in the ♀. The rather warm colouring, except when (as is chiefly the case in ♀♀) this is much irrorated or suffused with fuscous, the narrow median area, the clear ochreous subapical patch of the forewing (very conspicuous in most ♀♀) and the well irrorated, extremely weakly marked underside are the best characters for recognition. The ♀ is considerably larger than
remotata. the ♂, with the hindwing more crenate. — ab. **remotata** *Warr.*, described on a Tore (Uganda) ♂ as a species, does not really require a separate name, though the specimen has the postmedian line of the forewing more deeply incurved in its posterior half and here a little thickened. — *simulatrix* should be more closely studied, for it has been bred from castor oil, cotton and coffee and might, if it multiplied, assume economic importance. I have earlier determined it (through the Imperial Institute of Entomology) as "*Hemerophila*" *simulatrix*. It
crenifera. is already known to be distributed from Sierra Leone by Uganda, if not also Kenya. — **crenifera** *subsp. nov.* is considerably larger (46 mm), relatively longer-winged, the distal margins, especially that of the hindwing, more markedly dentate; more mottled and with the postmedian line of the underside somewhat better expressed than in typical *simulatrix*. Mt. Elgon, October 1931 (T. H. E. Jackson), type ♂ in the British Museum. A ♀ from Kitale, Kenya, which agrees fairly well with it, expands 55 mm and has the teeth of the hindwing still further developed.

oncera. **C. oncera** *sp. n.* (16 f). Also considerably larger than *simulatrix* (♂ 46—53 mm, ♀ unknown), distal margin of forewing somewhat more oblique than in the ♂ of that species, that of the hindwing not more crenulate. Variable in the degree of dark clouding, but very seldom as clear as in typical *simulatrix* ♂; median area

of forewing narrower, especially at fold, where (as also at 2nd submedian) the postmedian line follows about the same course as in *divisaria*, costal edge strongly speckled with black. Diego Suarez (G. Melou), a series in the Tring Museum.

C. umbrata *sp. n.* (17 b). Expanse 51—56 mm. Antenna with the last 8 or 9 joints non-pectinate. *umbrata.* Foretibial hair well developed; hind tibia rather stout distally, without hair-pencil. Forewing with a small fovea. In shape and facies rather suggestive of a not extremely robust *Aphilopota* but with the venation of *Colocleora*, the first two subcostals well free; grey-brown, with somewhat elongate cell-marks (strongest in the type), punctiform postmedian, weak median and on the forewing a strongly bent antemedian, weak except at the costa but bounding a markedly brown, black-speckled proximal area; both wings with a further brown band between the postmedian and the subterminal, which is scarcely indicated except by the return of the pale ground-colour. Underside with the cell-spots enlarged, the postmedian dots and traces of the brown outer shade present. Madagascar: Forêt d' Isaka, near Fort Dauphin (R. Catala), type ♂ and another; Perinet, E. of Tananarico (Madame N. d'Olsoufieff), 1 ♂. None is in perfect condition, but the species is easily recognized.

29. Genus: **Anacleora** *Janse.*

Differs from *Colocleora* in the well-vedeloped tongue and the shorter pectinations of the ♂ antenna (about 4 times diameter of shaft); the genitalia, moreover, differ from those of both the *Colocleora* with which Janse was acquainted (*divisaria* and *proximaria*). Legs smooth-scaled. Forewing in both sexes with 1st and 2nd subcostals separate the 1st occasionally anastomosing with the costal or the 2nd (in the type ♀ quite exceptionally) arising from the base of the 3rd—5th. Type and sole species: *extremaria Walk.*

A. extremaria *Walk.* (= haploocnema *Prout*) (17 a). Recognizable by the generic characters and in *extremaria.* any case, I think, by the shape combined with markings. According to Janse, however, some forms of this and of *Racotis* (?) *apodosima* (his *Racotis "zebrina"*, olim) can be confusingly similar; but t y p i c a l *apodosima* has a larger, more ocellated cell-spot on the forewing and a more or less broad dark subterminal band on both wings beneath, while *extremaria* has only very incomplete and narrow subterminal shading beneath, chiefly on the anterior part of the forewing; in *extremaria* the 1st line of the hindwing is midway between base and cell-spot, in *apodosima* near the cell-spot. From *Colocleora pulverosa*, which has somewhat the same pale olivaceous or yellowish tone, *extremaria* differs in its less broad wings, different postmedian, with dark marks at veins R^3 and M^1, etc. Natal, Zululand and Transvaal.

30. Genus: **Nychiodes** *Led.*

(See Vol. 4, p. 360.)

A Palaearctic genus, which probably does not reach the African Region. It has, however, been used to accomodate one species which agrees with it in the vestigial tongue and the pectinate antenna of the ♀, etc.. but differs in the much smaller size, smoother scaling, presence of fovea and non-dentate termen of the hindwing; 1st and 2nd subcostals of the forewing coincident.

N. tyttha *Prout* (15 h). Somewhat variable in colour, occasionally more ochreous than the type and *tyttha.* our figured specimen, but pretty constant in the approximation of the lines, etc. Pectinations long in the ♂, but not continuing to the apex. Perhaps collateral with *Colocleora*, from which it differs in the less hairy clothing and the constancy (so fur as is yet known) of the loss of one subcostal vein. Described from Eritrea, but subsequently taken chiefly in South Africa: N. E. Rhodesia to the Transvaal and Lozenzo Marquez and even at Stanger, Natal.

31. Genus: **Aphilopota** *Warr.*

Face rough. Palpus shortish to moderate. Tongue wanting or vestigial. Antenna rather short; in the ♂ with long pectinations. Breast shaggy. Femora hairy; hindtibia with all spurs. Wings densely scaled; forewing with 1st and 2nd subcostals coincident. An exclusively African genus of moderately large and robust moths with simple pattern.

Section I. *Tongue present.*

A. vicaria *Walk.* The only known specimen, a ♀ from "West Africa" (E. Doubleday), is in very bad *vicaria.* condition and it is uncertain whether it even belongs to the present genus. Tongue about as in *plethora*. Palpus short. Antennae lost. Length of a forewing about 27 mm, shape much as in (the smaller) *patulata*, or with termen slightly more convex, hindwing about as crenulate as in ♀ *patulata*. The cell-marks appear to have been long-oval, pale-mixed, and the forewing to have had postmedian dots in about the *patulata* position; the

hindwing certainly has such dots, both above and beneath, also a diffuse and not intense median shade, about 2—4 mm proximal to cell-mark, and a very slight brownish presubterminal shade. Possibly nearer to "*Ectropis*" *inelegans Warr.*, but the wings are less crenate, the colour less ochre, the postmedian punctiform, and it seems to have the venation of *Apilopota*.

plethora. **A. plethora** *sp. n.* (16 g). Tongue slender and quite short (perhaps twice the length of diameter of eye). Palpus short. Antenna of the ♂ pectinate to about $^4/_5$. Forewing with termen well curved; somewhat more suffused with brown than in *seminsta*, at least in a narrow shading outside the postmedian; markings formed nearly as in those *seminsta* in which the postmedian is nearest to the cell-spot, but stronger, notably the subterminal and its proximal shade; postmedian in places rather thick, on hindwing sharply angled at fold; a relatively pale band between this and the subterminal shade. The principal markings developed beneath, though less strong. ♀ larger (52 mm). Bulawayo, 1 December 1924 and 14 January 1925 (R. Stevensen), a pair. Type ♂ in the Transvaal Museum.

Section II. Tongue wanting or vestigial (*Aphilopota* vera).

semidentata. **A. semidentata** *Prout* (16 g). Forewing with termen rather strongly curved, hindwing more crenulate than in continental *Aphilopota*. Irroration coarser and in part more confluent than in most; cell-spot of forewing large. Variable, but distinctive. Diego Suarez, a good series of ♂♂, collected by Melou.

aspera. **A. aspera** *sp. n.* (15 g). Closely similar to the least variegated, greyest *semidentata*. Forewing with termen more concave and crenate between apex and 1st radial, then very oblique to tornus; postmedian punctiform throughout, on the underside well curved near costa. Hindwing with termen rather more strongly convex then in *semidentata*, the teeth perhaps slightly stronger. Perinet, 149 km. E. of Tananarivo, March 1935 (N. and G. Olsoufieff), the unique type, 1 ♂, in the Tring Museum.

immatura. **A. immatura** *sp. n.* (15 a). Much smaller than the two preceding. In shape nearer *semidentata*, though the termen of the forewings a little smoother; in markings nearer *aspera*, at least as regards the anterior curve of the postmedian of the forewing both above and beneath; the blackish cloudings probably vary but are less developed than in the allies, in the distal area of the forewing they concentrate in a narrow band outside the postmedian and a pair of subterminal spots between the radials. Hindwing also relatively clearer, the cell-mark smaller, scarcely pupilled. Underside pale, especially the hindwing, irroration reduced. Both wings with cell-ring (that of the hindwing incomplete); forewing with the punctiform postmedian line. S. W. Madagascar: Lambomakandro, Sakaraha, Tulear, March 1935 R. Catala), 1 ♂.

allocomorpha. **A. alloeomorpha** *sp. n.* (15 a). Curiously similar to the preceding in structure, coloration and scheme of markings, but so different in shape that it seems impossible to regard it as a form thereof. Forewing with the oblique termen of a *Colocleora* or *Hemerophila*, hindwing also definitely more elongate and at 3rd radial less elbowed than in *immatura*. Cell-marks of upperside about equal in size and intensity; antemedian shade of forewing very oblique, directed towards the end of the cell; postmedian very oblique, obsolescent near costa, irregularly crenulate, with a deep inward curve in submedian area; distal area almost wholly dark. Hindwing with antemedian faint, postmedian more distal than in *immatura* and reaching costa near apex; a strong dark distal cloud. Underside much like that of *immatura*, more irrorated. Lambomakandro, collected with the preceding; both types are in the Tring Museum.

perscotia. **A. perscotia** *Prout* (16 g). Also distinctive in shape, termen forewing scarcely oblique anteriorly, strongly curved behind the 3rd radial, of hindwing faintly sinuous, appearing very slightly prominent (but not toothed) between 3rd radial and 2nd median. Postmedian line characteristic, lunulate-dentate. Transkei, only the type ♂ known. In markings similar to a less dark *dicampsis*.

patulata. **A. patulata** *Walk.* (17 c). Palpus less short than in most *Aphilopota*. Postmedian line marked with black vein-dots. Median area often lighter than proximal and distal, giving it a banded appearance. Cape Colony (type). Natal and Delagoa Bay, seldom if ever common. — ♀ — f. **conturbata** *Walk.*, also from the Cape, is pale and weakly marked and was formerly (but erroneously) sunk to *vicaria*. I gather from Janse's account that this may be the regular ♀ form of the species. — **mesotoecha** *form. nov.* Considerably smaller (36 mm), the darkened areas less pronounced than in typical ♂♂; forewing with a strong, broad, dark median line or shade, well proximal to the cell-mark: hindwing with the cell-mark reduced; underside with the postmedian of both wings slightly more curved near the costa. Pretoria, November 1913 (Lord Gladstone), 1 ♂ in the Transvaal Museum. Whether an aberration or subspecies should be revealed by further captures in the district.

conturbata. *mesotoecha.*

strigosissima. **A. strigosissima** *Bastelb.* (18 c). Relatively broad-winged, above and beneath almost uniformly irrorated and strigulated, so that the usual lines are obliterated or only discernible with close attention: veins conspicuously pale: cell-spots sharply black. Only known from Angola. — **castellana** *form. nov.* is similar but smaller

castellana.

a
ozoloides
vethi
dichroaria ♂
dichroaria U
patris-aloysii ♂
patris-aloysii ♀
incertaria

b
macritibia
alucitaria
synecdema
hyperphyes
iridoptera
thearia
marginepunctata

c
thrombocnemis
puella
syllaria
impunctata
pulverulenta
conscitaria
maculata

d
rubrifusa
püngeleri ♀
rectistrigaria ♂
cervinaria ♀
muricolor ♀
equitaria ♀

e
helcita ♂
helcita ♀
dissoluta
biocellaria

f
erici ♀
erici ♂
libyssa ♀
ethelinda ♂
monteironis ♂

g
melanopis ♂
sapor ♂
forbesi ♂
variabilis ♀
variabilis ♂
gracilis ♂

h
gracilis ♀
geometrina
kedar ♀
tenuis ♂
tenuis ♀
costimaculata

Hauserpresse / Werner u. Winter G. m. b. H., Frankfurt a. M.

a

commutata

b

recognita ♀ recognita ♂

c

pauperi multiscripta

d

fuscirhabsa

e

deposaria

f

punctaria

g

kuranala

h

congrua

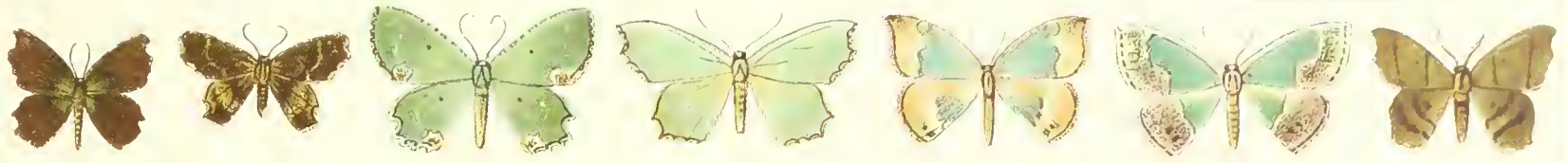
i

fluctifera fronoinata ♂ frondinaria

k

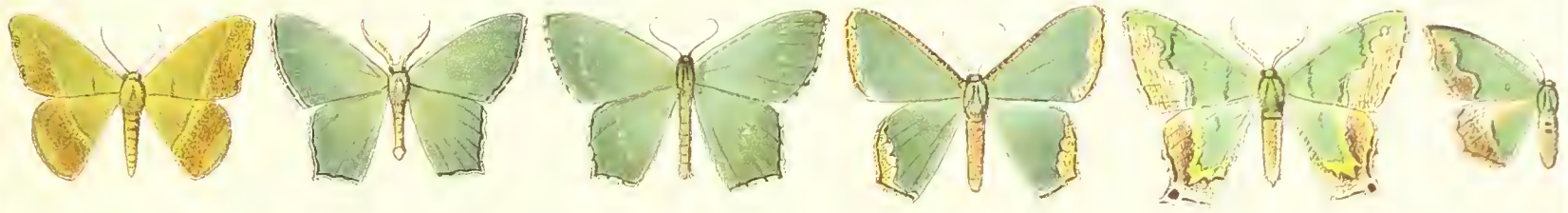
bicolor crucidata

a



melanceuthes excavata biflorata holochroa aequisecta rothi turcimaria

b

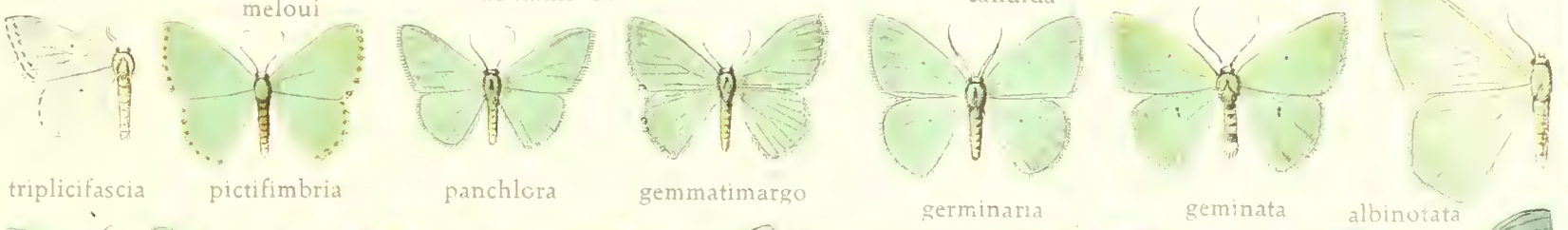


subfulva interalbicans simplicimargo orinophragma papilio chlorinesis

c

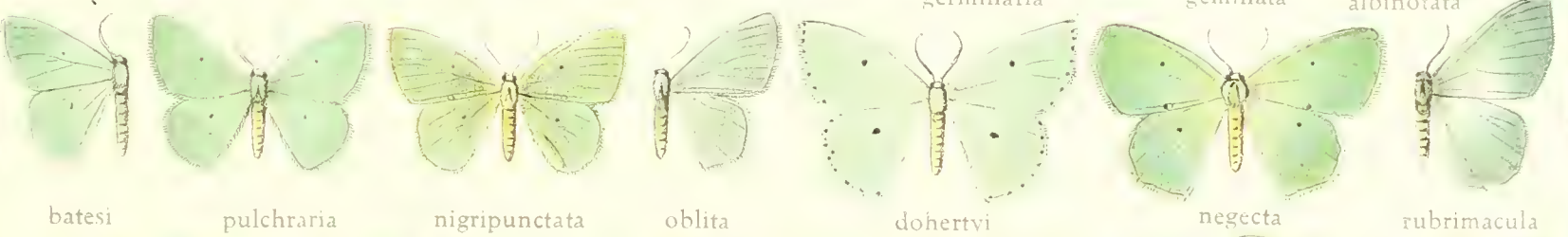
oblongata meloui dentatilinea progressa candida tranquilla simiaria

d



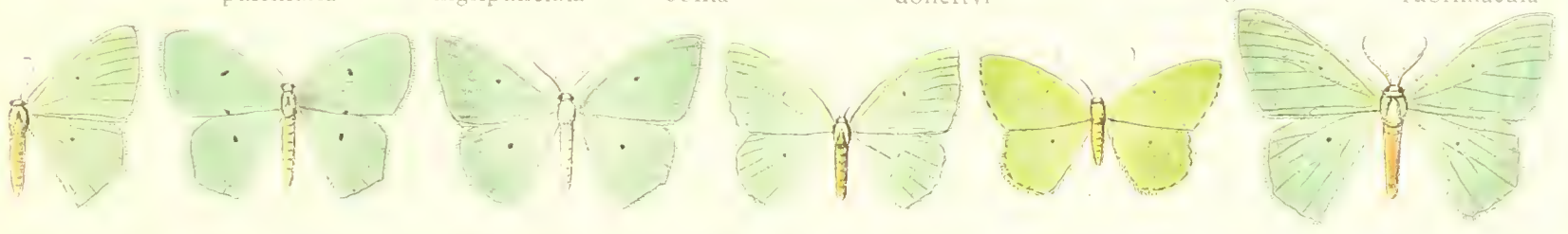
triplicifascia pictifimbria panchlora gemmatimargo germinaria geminata albinotata

e



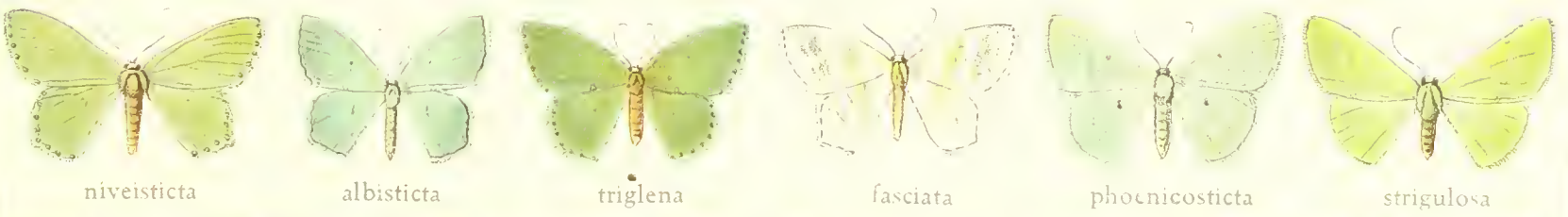
batesi pulchraria nigripunctata oblita dohertyi negecta rubrimacula

f



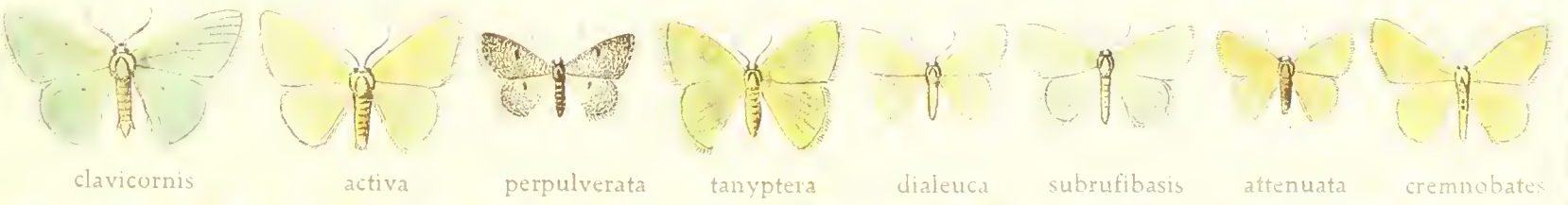
trifilifimbria centralis pupillata gajdacsi salutaria niphosporas

g



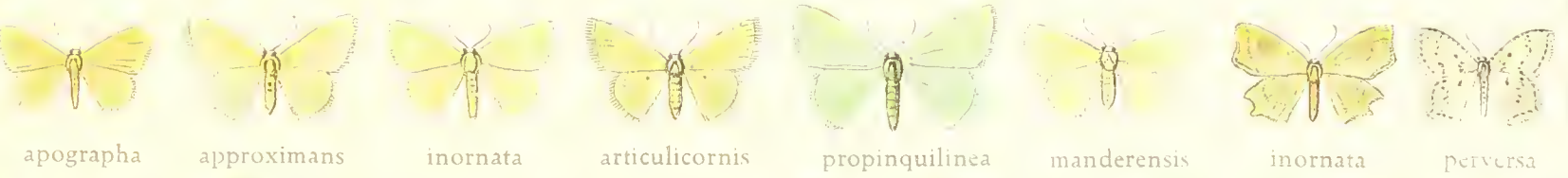
niveisticta albisticta triglena fasciata phoenicosticta strigulosa

h



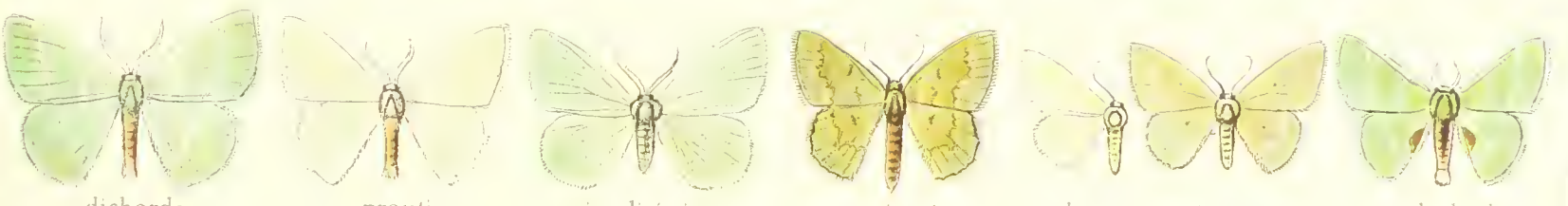
clavicornis activa perpulverata tanyptera dialeuca subrufibasis attenuata cremnobates

i



apographa approximans inornata articulicornis propinquilinea manderensis inornata perversa

k



dichorda prouti simplicissima saturata cohaerens impostura endorhoda

Hauserpresse Werner u. Winter G. m. b. H. Frankfurt a. M.

a

didita clopia diaphana trita simplex melanophragma dev[illegible]ata

b

lunatimargo tornata diphrontis insolens rubrimaculata leucocraspeda

c

rubriceps shorti bacoti callista equestralis distelin[illegible]

d

discolor ruficornis depompata bicolor invenusta prasinops cellulata

e

oedocnemis affinis robusta migrata ochrea illacerata undulilinea dissimilis

f

errata minutaria leucocephala crassisquama pallida monochroma ericinellae

g

dichroma periconia fraudulenta umbrata terminata fleximargo divincta

h

·mimica pulchrifimbria vivida elegans curvilinea purifimbria punctilineata hypnopoea

i

incommoda ereuthopeza albifimbria abanga inspiciens intensa coerulea rubristicta simplex

k

subsimplex albistrigata xanthostephana viridans tenuis disparata impunctata biornata porphyretica

l

saliata persimilis bellista cumatilis annuligera hemictenes

Hauserpresse Werner u. Winter G. m. b. H., Frankfurt a. M.

a
palliata
rhodocycla
austrina
cataractae
deprensa
sellata
ostracite
cinctuta

b
picticosta
anthosyne
melanopis
mianta
enotes
eluta
perileuca
pulvereispersa
micra

c
detrita
insueta
idmon
featheri
hypocrypta
roezaria
dissimilis

d
swierstrai ♂
swierstrai ♀
idia
mollior
ruficiliaria
elpis
xina
bicurvifera
imperfecta

e
alboviridata
grisea ♀
alterata
dyscheres
epicydra
alcaea

f
holochroa
triplaga
usiura
megacydes
ocellicincta
anoista
ectopostigma
orthogramma

g
stictoloma
gnamptoloma
kenricki
zombensis
heringi
drepanodes
polysticta

h
zaphleges
dollmani
hyalotypa
polyniphes
peristoecha
anthocroca
volutisignata
lutearia ♂

i
dewitzi ♀
metamorpha
spectrum
subviridata
centrophora
rhodochila
dewitzi ♂

k
pythiaria
fraus
apicipuncta
impunctalata
ioscia
chaliboeata
syneorus
tungifera

l
dysmorpha
probleptica
callibotrys
acinosa
crescentifera
peararia
subobliquata

Hauserpresse Werner u. Winter, Universitätsdruckerei G. m. b. H. Frankfurt a. M.

a
teledapa ♂ definita ♂ ornithospila ♀ brunneifrons ♀ textilis ♂ inoffensa ♂ mansueta

b
rubripennis ♀ apicirubra ♂ subcarnea ♂ rubriplaga rosina ♂ leighata ♀ erythraria ♂ pallida ♂

c
rufistrigata ♀ falcata ♀ viridaria ♂ ocellata ♂ obversata ♀ atrovividata neptunaria ♂ poeciloptera ♂

d
leonaria ♂ hirtifemur ♀ diplosticta ♂ sublunata ♂ miscella ♂ perstrigulata ♂

e
unocula ♀ denticulata ♂ chrysoparalias ♂ orboculata ♀ subfasciata ♂ trisinuata ♂ arrogans ♂

f
hamularia ♂ ctenophora ♂ sedata ♀ irregularis ♂ lia ♂ nucleata ♀

g
figurata ♀ vestalis ♂ virginalis ♂ arciocentra ♀ antractilinea ♀ synnephes ♂ lactea ♂ protrusifrons ♀

h
dentilinea ♂ rufisalsa ♂ palleuca monotropa palpifera atramentaria curvimargo consentanea

i
albida ♂ fulvilinea ♀ impicta flexio gazellaria ♂ promethes punctilineata ♂ concurrens ♀ donovani ♀

k
dapharia ♂ irrufata ♂ nepheloperas candidaria ♂ plionocentra ♀ minoa ♀ longitarsata ♀ sinnaria ♀

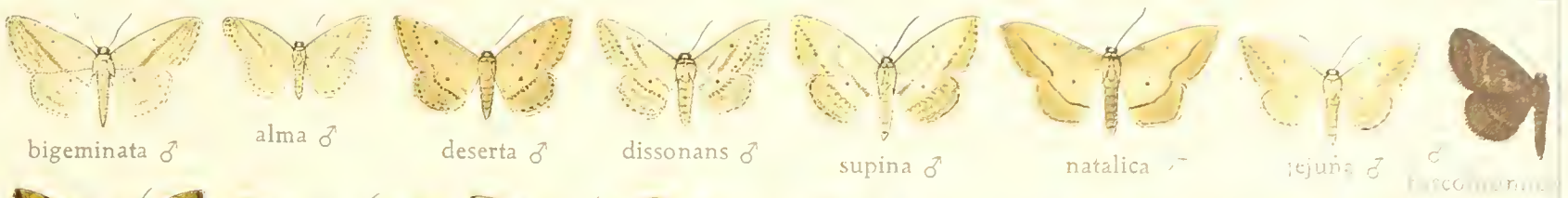
l
nigrinotata ♂ beccarii ♀ (eremochroa) (flavipars) inscriptata ♂ sagittilinea ♂ accentuata ♂ cassiaria ♂

m
cassioides ♀ subpectinata ♂ opicata ♂ euphemia ♀ mesophaena ♀ fragilis ♂ silonaria ♂ erinaria ♂

Hauserpresse Werner u. Winter, Universitätsdruckerei G. m. b. H., Frankfurt a. M.


MUSEUM
HISTORY

a

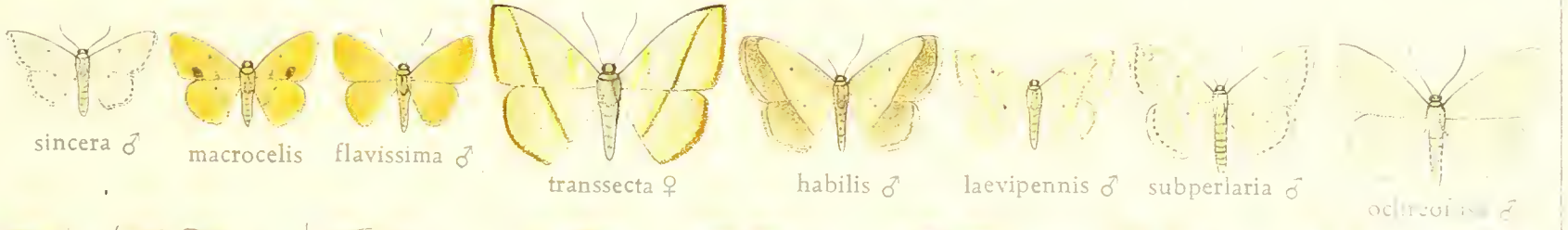


b

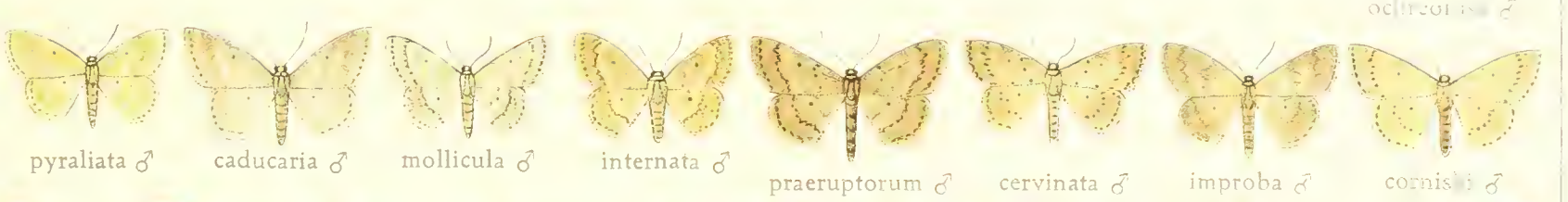
c

d

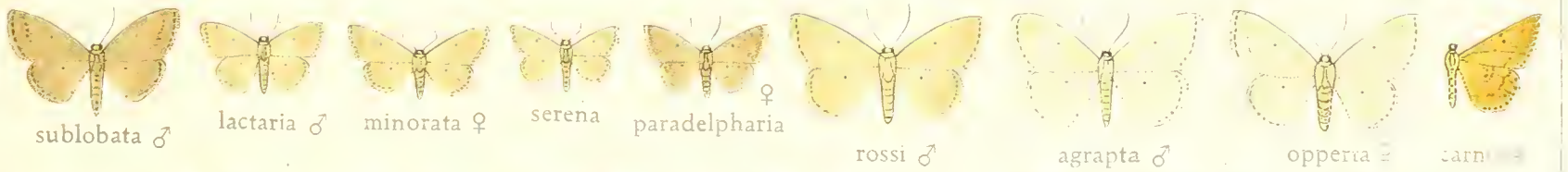
e



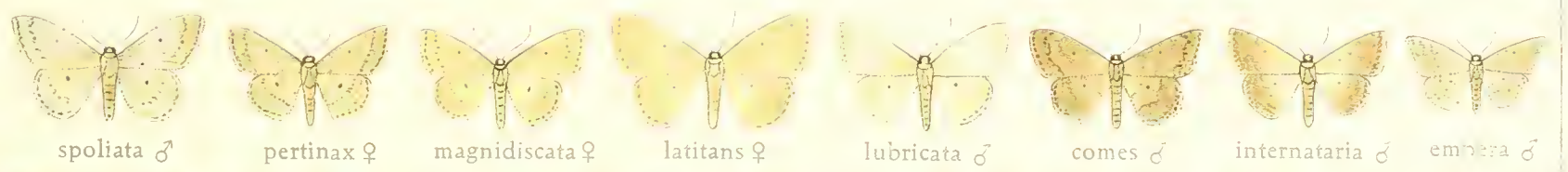
f



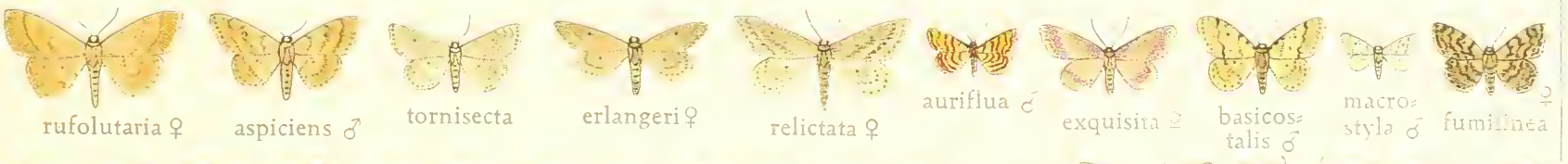
g



h



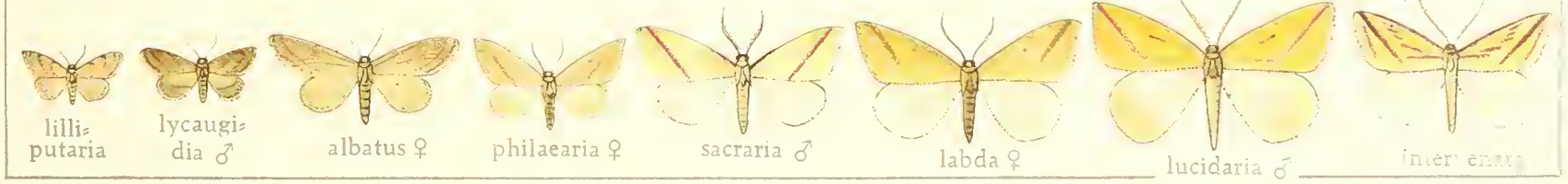
i



k

l

m



Hauserpresse Werner u. Winter Universitätsdruckerei G. m. b. H. Frankfurt a. M.

a
oressigenes
anisorrhopa
innocens
grataria ♂
suarezensis ♂
pyranges
diapsis ♀
procne ♂

b
poseata ♂
conchata ♂
heliopharia ♂
phyxelia ♂
melissaria ♂
borbonicata ♀
eugraphata
transcissa ♀

c
transjugata ♂
ansorgei ♂
morosa
calycopsis
holophaea
trientata ♂
exorista ♂

d
natalata ♂
subspissata
discata
cryptospilata
cryptocycla
peringueyi
subrectiaria

e
rhiogyra
ferridotata
deversa ♂
horismodes
crenulimargo
olbia ♀
albiclausa

f
limonias
lamprammodes
epipercna
alumna
petrogenes
arenaria

g
nictitaria
monosticta
atrosigillata
megalaria ♂
dulcis
diplocampa

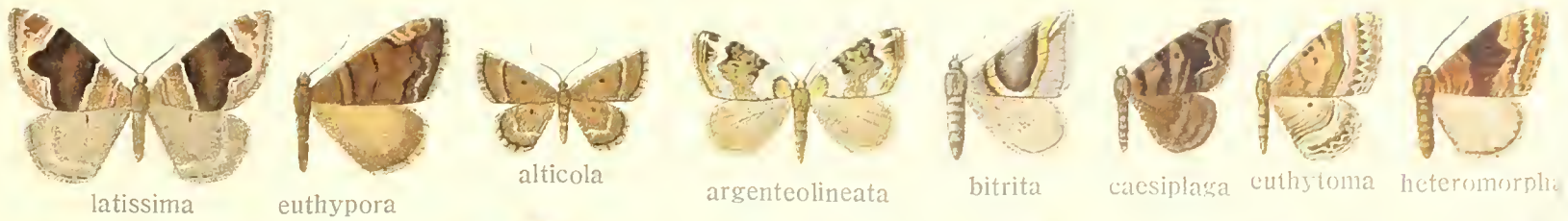
h
hancocki
wellsi
barnsi ♂
phiara
conchulata
vana

i
carnifasciata ♀
animosa ♂
meridionata ♀
obtusa ♂
indentata
coaequata

k
inaequata ♂
altipeta
distinctata ♀
divergens ♂
artifex
tritocelidaria

Alfred Kernen, Abt. Steindruck, Stuttgart

a


latissima
euthypora
alticola
argenteolineata
bitrita
caesiplaga
euthytoma
heteromorpha

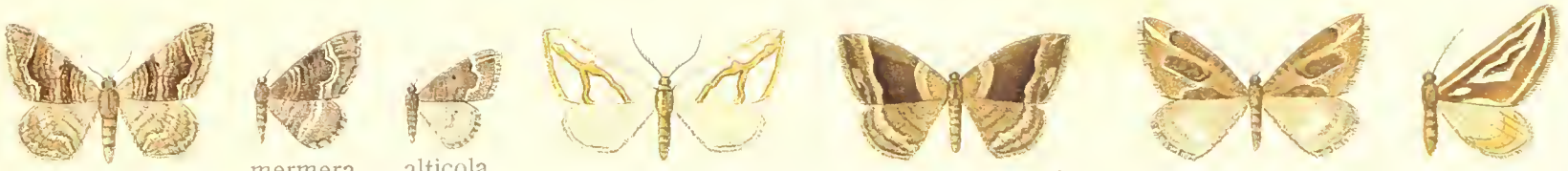
b


acme
eviscerata
altispex
alternata
lamellata
actena
irene

c


nitidula
decorata
sesquifascia
canescens
pactolaria
lapsicolumna
ditissimaria
rhabdocampa

d


explanata ♂
mermera
alticola
gamma
euthygramma ♂
neddaria
frosinaria

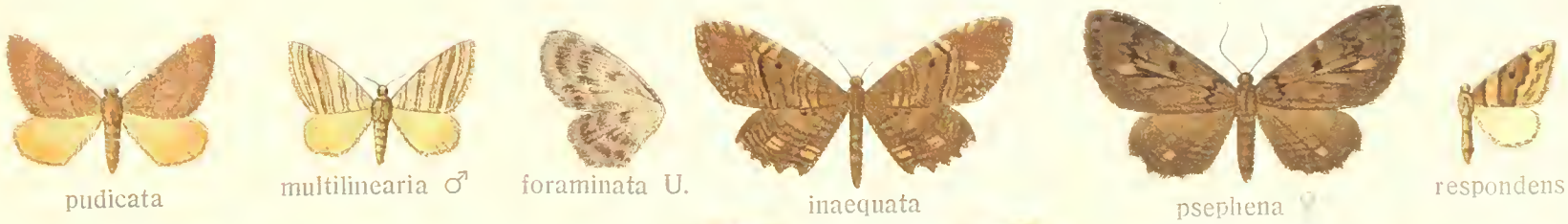
e


thermochroa
timia
achatina
edelsteni
submaculata ♂
consors
rhodopnoa

f


pyrrhochra
tepescens
undulosata ♂
deplanata
thorenaria
annulifera ♂
cancellata ♀

g


pudicata
multilinearia ♂
foraminata U.
inaequata
psephena ♀
respondens

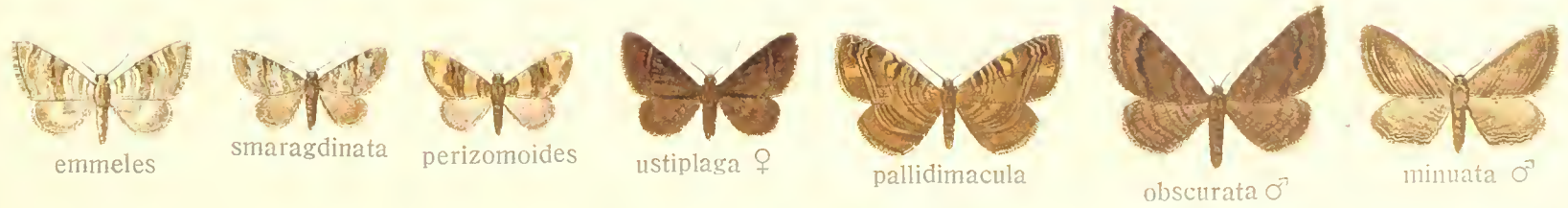
h


prasinaria
chlorostola
subrufaria ♂
albirupta
ansorgei
spatiosata ♀

i


fumitacta ♀
subterlimbata ♀
myopteryx
cidariata ♂
bryophilaria ♀
dryas ♀
lightfooti

k


emmeles
smaragdinata
perizomoides
ustiplaga ♀
pallidimacula
obscurata ♂
minuata ♂

Alfred Kernen, Abt. Steindruck, Stuttgart


FISH MUSEUM
TRING
ENTOMOLOGY

HORISME-LOBIDIOPTERYX

a


punctiscripta


pretoriana


hargreavesi


nimipunctata ♂


dilecta ♂

b


coaequalis ♂


thessa ♀


sporadicea ♀


festiva


oblongipennis


dinertyi

c


immodica


semiflavata


mecodaedala


ecplyta


medilunata


dissociapta

d


amphiplex


somereni


nabagulensis


perigrapta


streptozona


cinerea

e


undiculata


adunata


gradatilinea


rubiginifera


subscriptaria ♂


polylibades ♀

f


resarta


rediviva


hypophasma ♂


laticallis ♂


caladisigna


mendosaria

g

semipallida

subcanipars ♀

influa ♂

influa ♀

infausta

licida

psychopnila

h

subconclusaria

anguinata ♀

inconclusaria ♂

frenica ♀

bimensa ♂

angella

cellia

i

grisea ♀

dietzei

viridigrisea

mokensis

consocer

leighi

lunosa

symmocallida

k

veninotata

aurivilliusi ♂

euvares ♀

stulta ♂

thermae ♂

Alfred Kernen, Abt. Senckenberg, Stuttgart

a
catoglypta desiderata flavovirata ♂ progressata ♂ sinuata ♀ lux ♀ cuneata ♀ crassulata

b
chlamydata consobrina ♂ deplanata ♂ perversata ♀ russata ♂ cuneata ♀ [illegible] ♂

c
subcomosa ♂ subcomosa ♀ exilivalva [illegible] [illegible] bivalva ♀ crassata ♀ [illegible]

d
tripartita acutivenata [illegible] ♂ [illegible] ♂ sanoides ♂ [illegible] [illegible] spermatis ♂ [illegible]

e
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

f
inaequalis ♂ [illegible] ♂ [illegible] [illegible] ♂ [illegible] ♂ [illegible] ♂ [illegible]

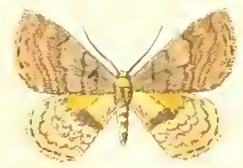
g
myrtocosmia ♂ [illegible] ♂ [illegible] [illegible] [illegible] ♂ [illegible] ♂ [illegible]

h
[illegible] ♂ [illegible] ♂ uripogonias [illegible] ♂ [illegible] [illegible] ♂ [illegible] [illegible]

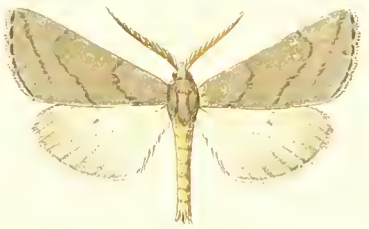
i
perquisita [illegible] ♀ [illegible] ♂ [illegible] ♂ [illegible]

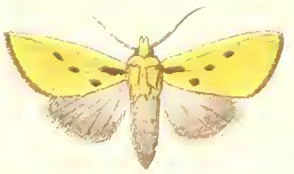
Alfred Kaiser, Art. Anstalt, Stuttgart.

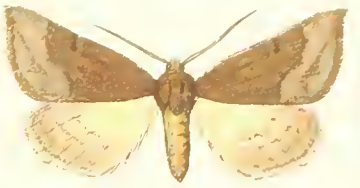
a


fernandi ♂

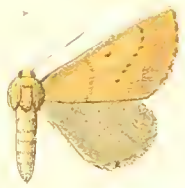

malostigma ♂


ava ♂


hemixantharia


reprobata ♀

b

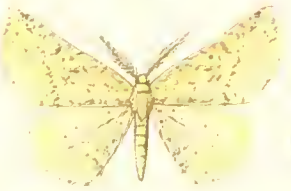

pictifimbria ♂


crinita


arcualis ♂


turneri ♂


tricolor ♂


sata ♂

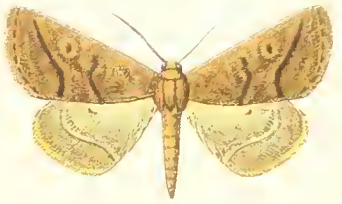
c


hypoptea ♂


metoeca ♀

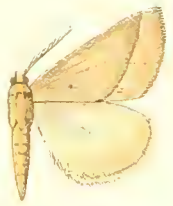

cervina ♀


rubidivenis ♂

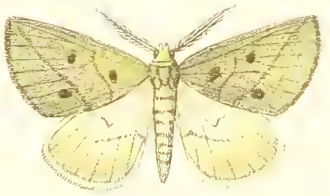

cnephaeogramma ♂

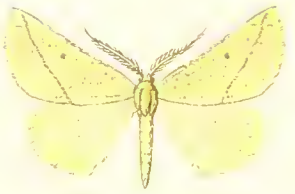

hypenissa ♂

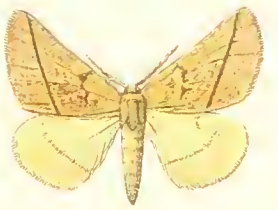
d


carneata ♂


carneata ♀


alicata


unilineata ♂


rufaria ♂


lacuum ♂

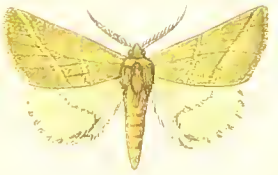
e

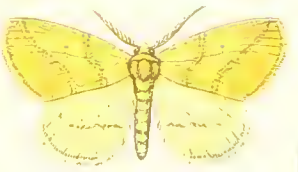

somereni ♂


olivata ♂


trimeres ♂

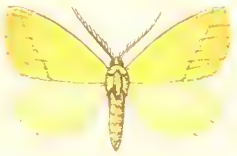

tullia ♂

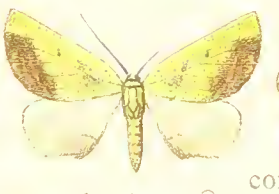

olearis ♂


algoaria

f

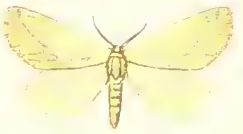

limettaria


cambogiaria ♂


cambogiaria ♀


convexaria

convexaria U


gynoloxa ♀

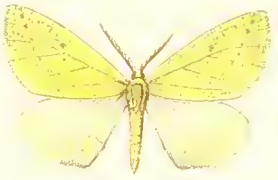

olivescens ♂

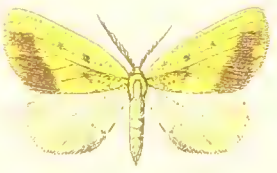

ocellata ♂

g


intuens ♀


warreni ♂


irrorata ♂


decipiens

curvifascia ♂

valida

h

canilinea

robertsoni

determi – nata ♂

nigerrima

ennomaria ♀

♂
dochmoleuce

i

bipartita ♂

sectilis ♂

inangulata ♂

dani ♂

sinuata ♂

intrivata ♂

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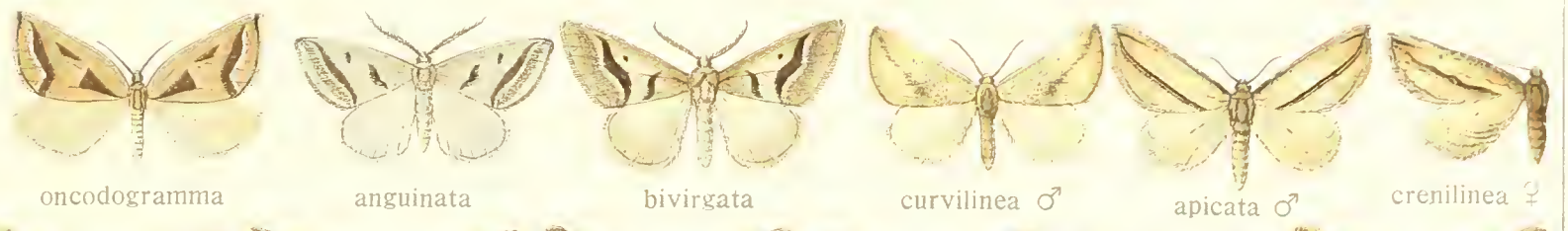
a

b



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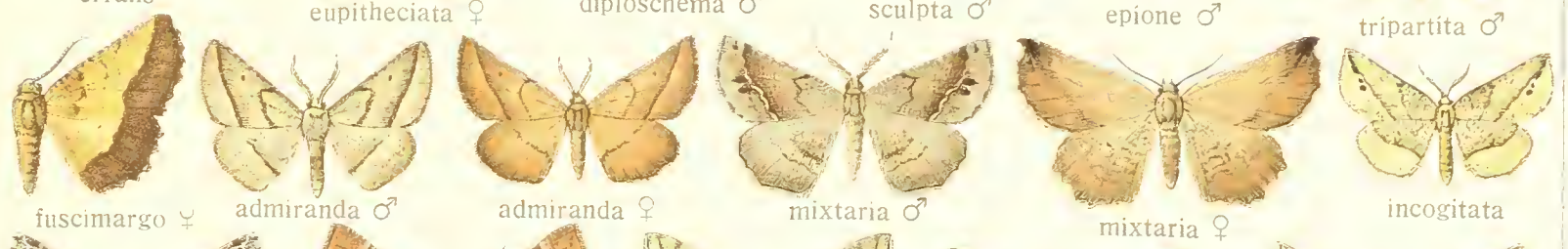

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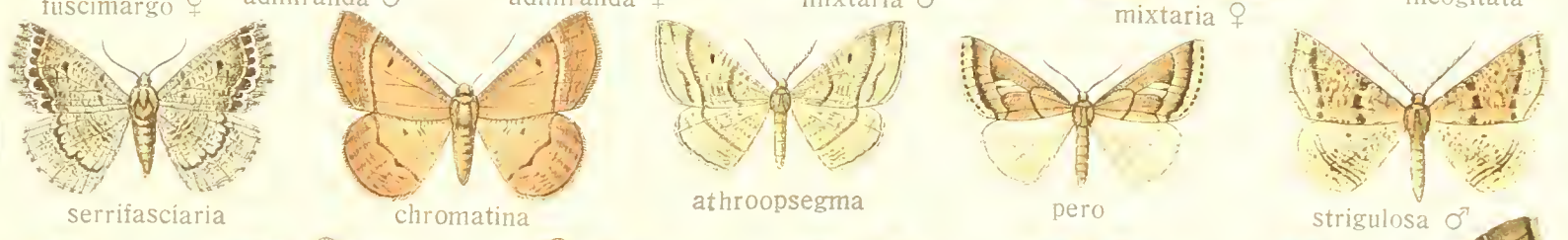

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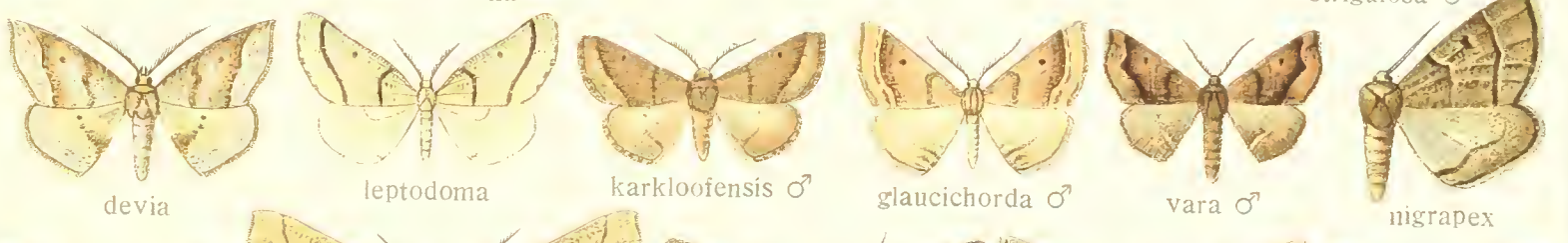

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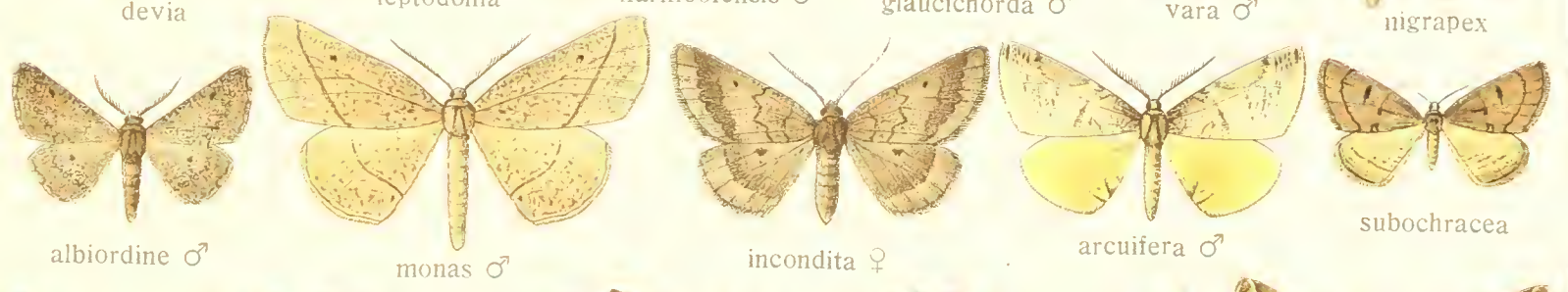

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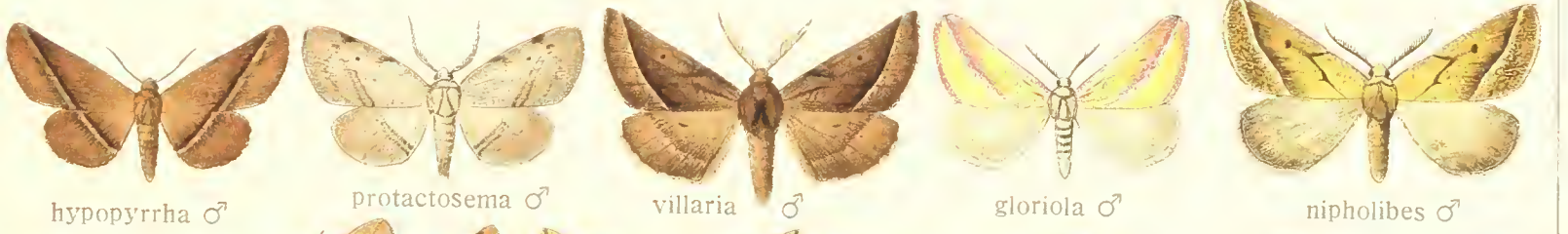

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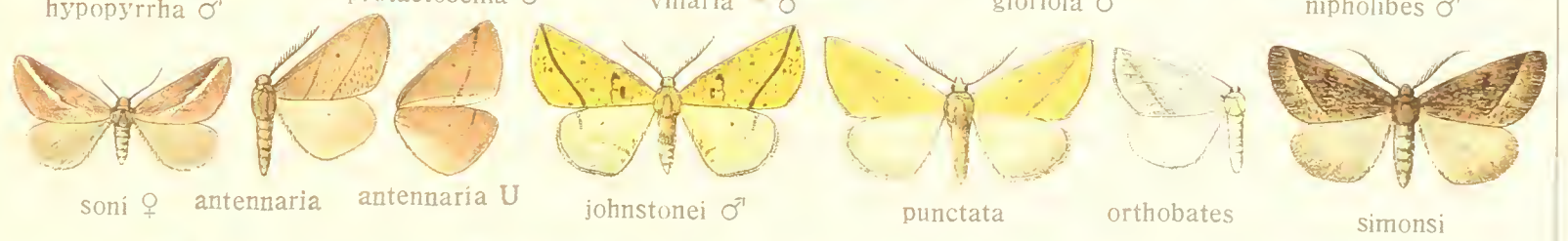

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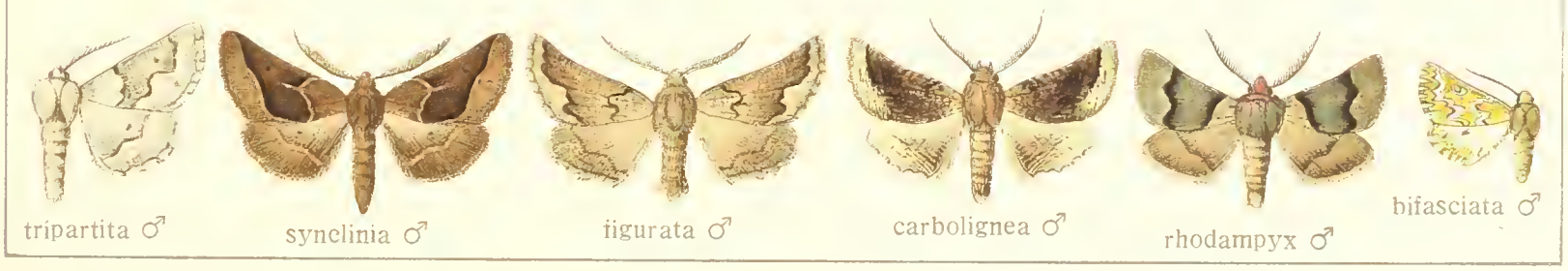

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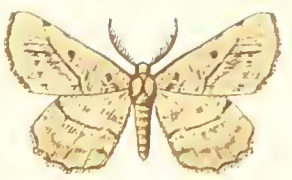
a


insulanus ♂


amygdala ♀


perculsaria ♂


alleomorpha ♂


immatura ♂

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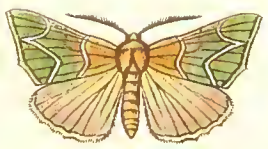
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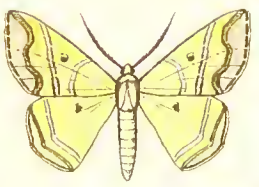
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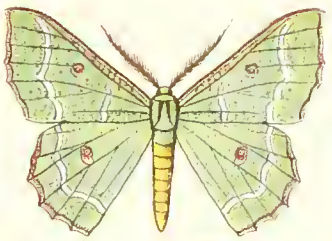
rhodoblemma


ceres


ansorgei


perplexata ♂

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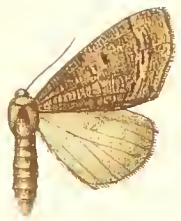
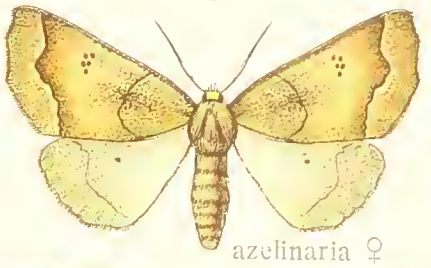

integraria


erebaria ♂


perse ♀


eamerunica


azelinaria ♀

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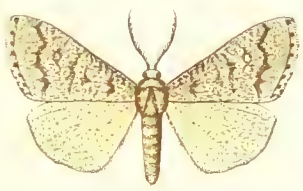
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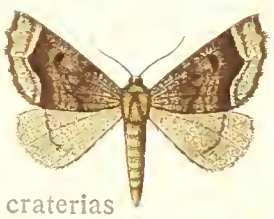
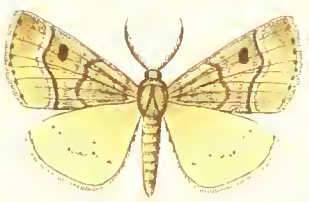
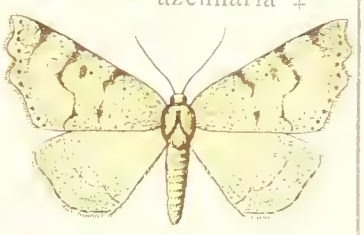

craterias


dicyrta ♂


curticosta ♂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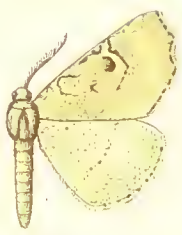
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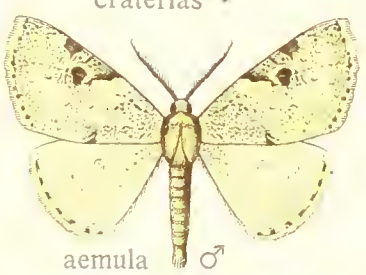
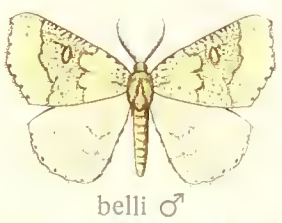
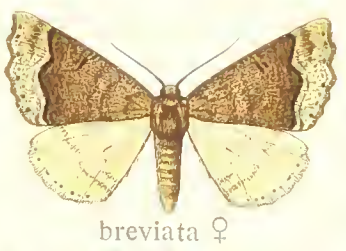
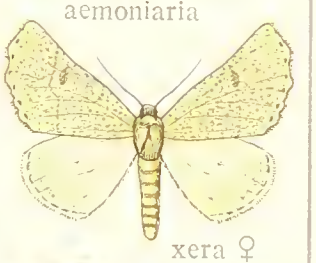

aemula ♂


belli ♂


breviata ♀


xera ♀

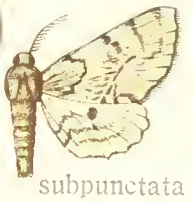
f


eugonia ♀


extorris


trisecta


crenulata


subpunctata

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fontis ♂


exocholoxa ♂


orographica ♂


indeflexa


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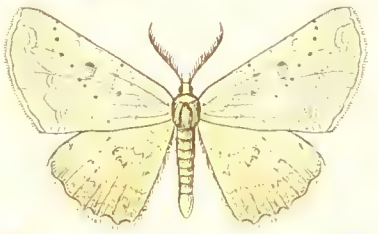
aspera

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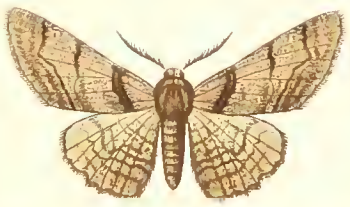
rufinubes


accentuata


maculatissimus ♀

tyttha ♂

johannaria ♂

i

abruptaria ♂

praeses ♂

nubimedia ♀

lignaria ♂

iconoclasis ♂

prosciodes ♂

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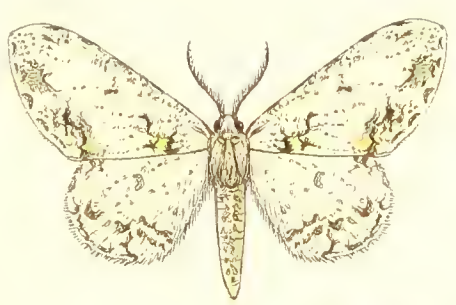
a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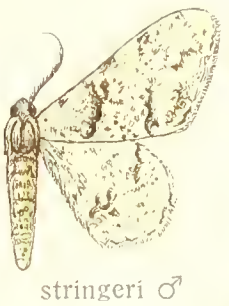
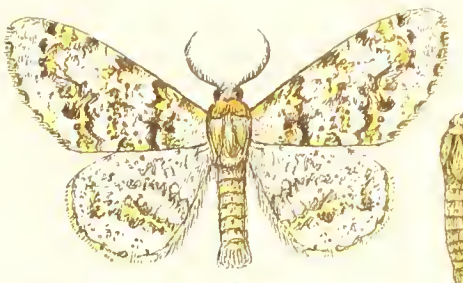
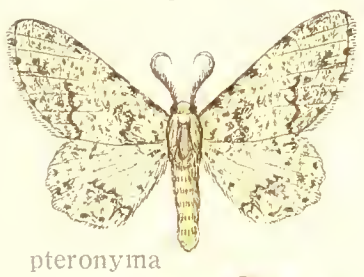

stringeri ♂


edwardsi ♂


mpalaria


antecreta

b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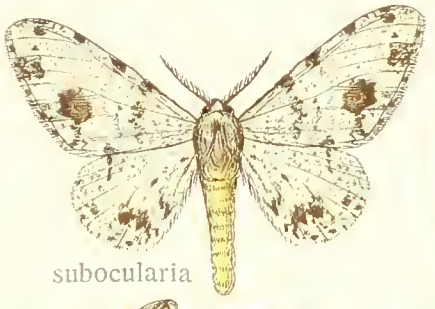
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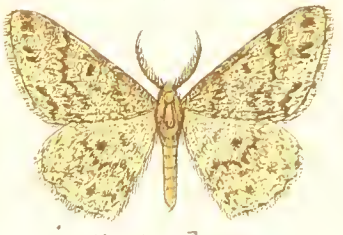
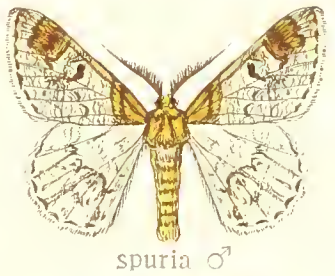
homoclera

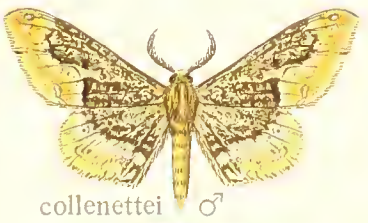

perpectinata ♂


polyplanes ♂

c


faceta ♂


spuria ♂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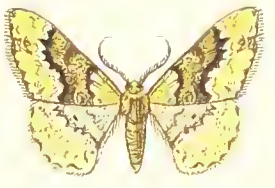
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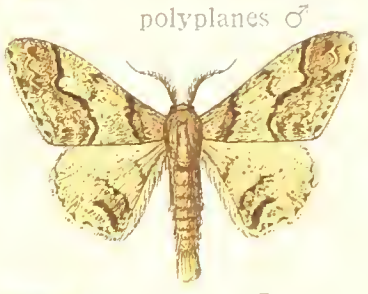
ansorgei ♂

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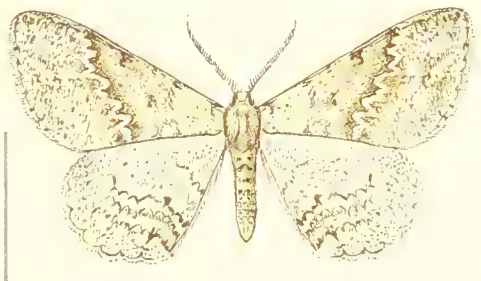
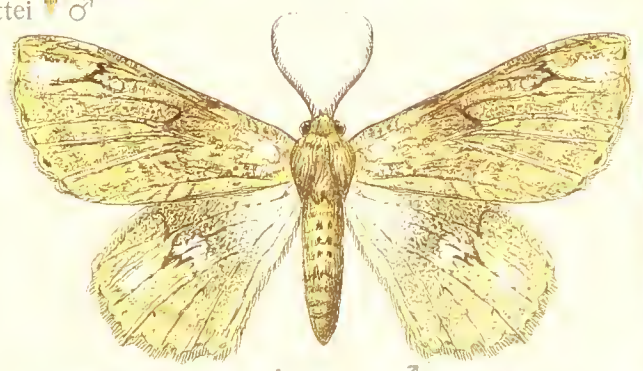

sciabola ♂


anisoscia ♂


polysemna ♂


clarivenata ♂

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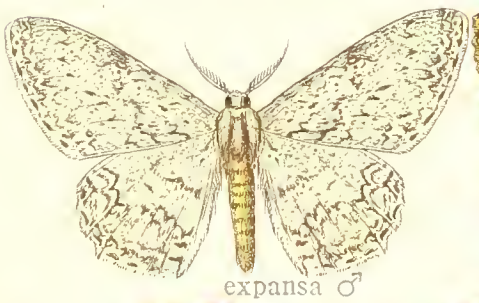
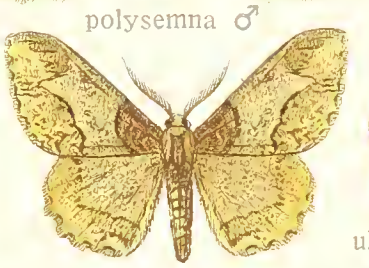

expansa ♂


divisaria ♂


separataria ♂

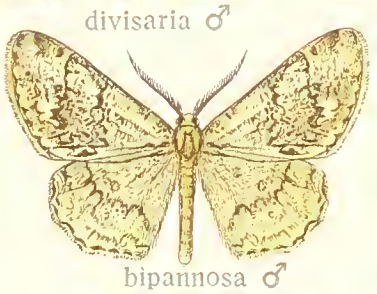

uloprora ♂

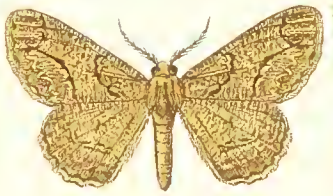

proximaria ♂

f


dollmani ♂


opisthommata ♂


bipannosa ♂


simulatrix ♂


oncera ♂

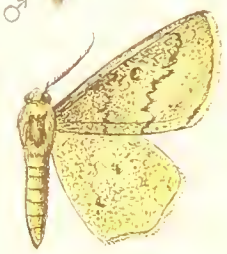
g


plethora ♂


semidentata ♂


cardinalli ♀


contemptaria ♂


perscotia ♂

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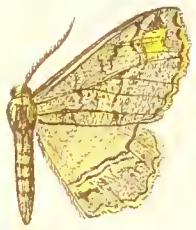
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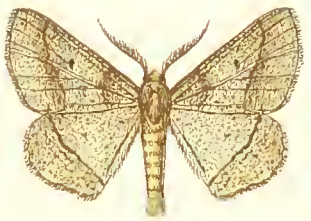
calaria ♂


symphronima ♂


focularia ♂


caparia ♂


subalbata

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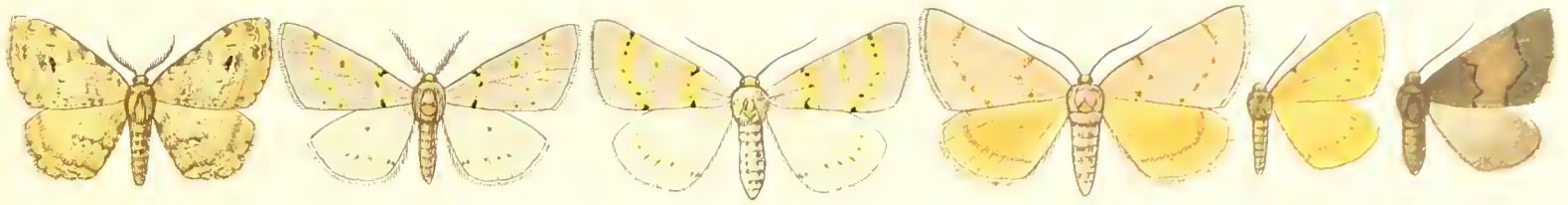
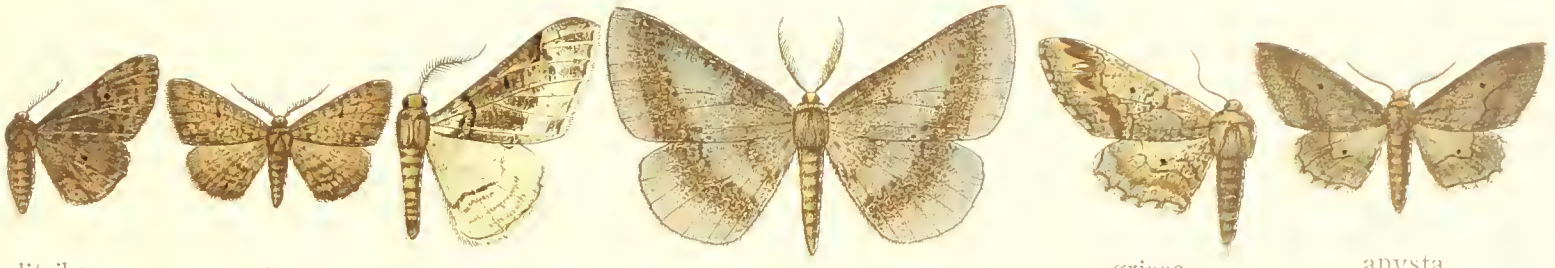


extremaria caffraria ♂ caffraria ♀ aurantiaca pretoria briela

b

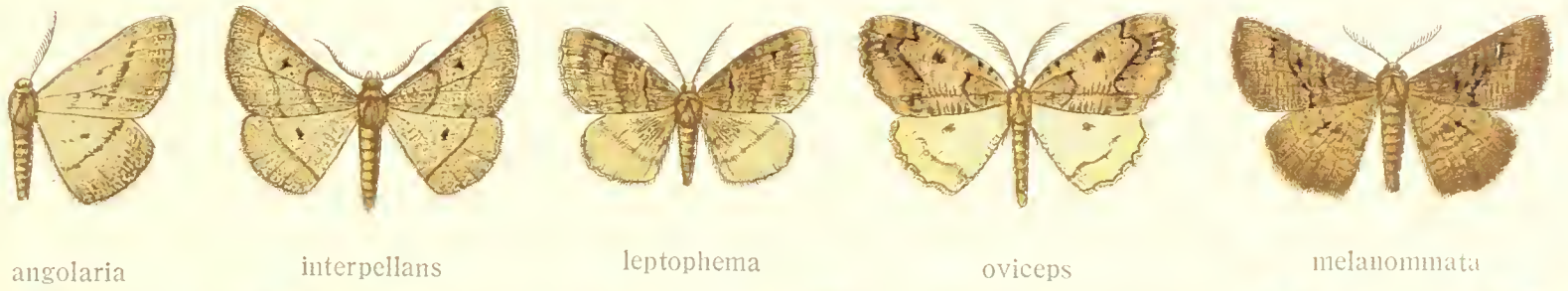


ditriba indigna catalai umbrata grisea apysta

c

patulata melanostigma triphasia statuta

d



angolaria interpellans leptophema oviceps melanommata

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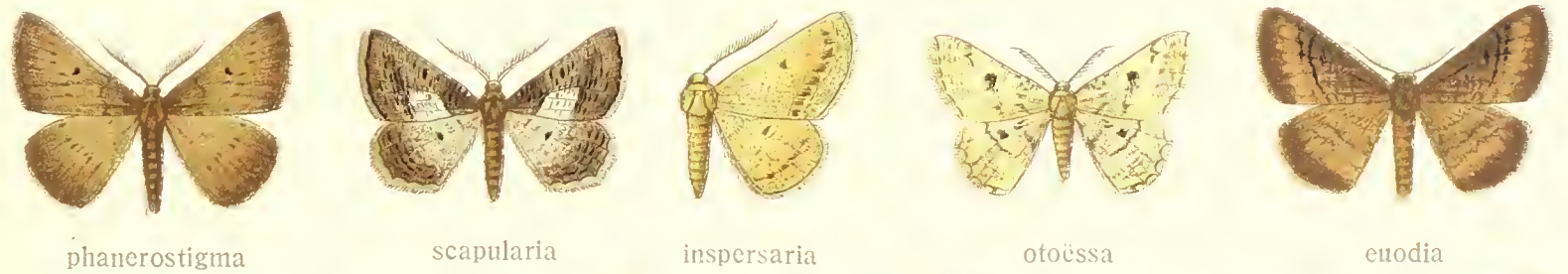

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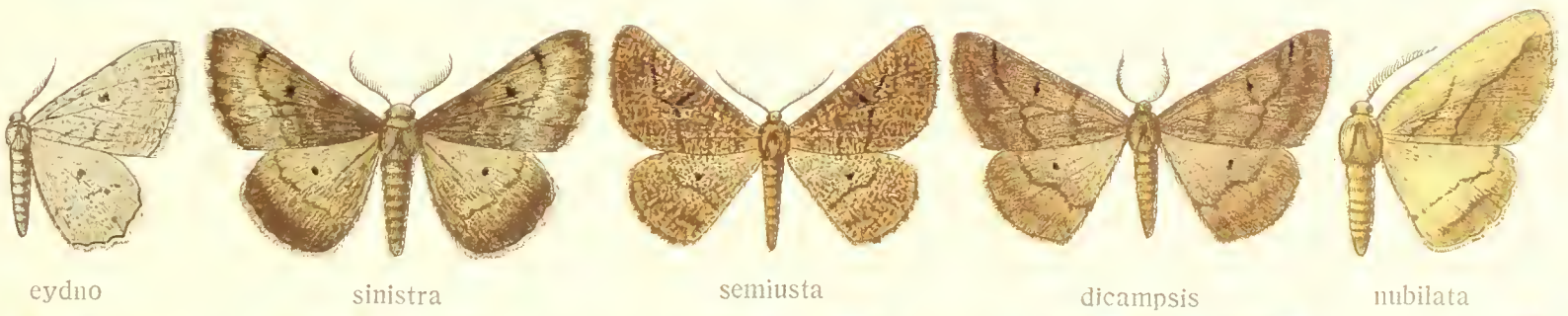

eydno sinistra semiusta dicampsis nubilata

g

caeca confusata rufiplaga plagifera olginaria

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